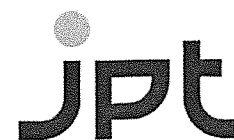


Jerini #	Peptide Name	Sequence	solubility in water	solubility in PBS	solubility in 10% acetic acid	solubility in DMSO
21168_01	SIVmac239 Vpx_001	H-MSDPRERIPPGNSGE-OH	-	-	+	+
21168_02	SIVmac239 Vpx_002	H-RERIPPGNSGEETIG-OH	-	-	+	+
21168_03	SIVmac239 Vpx_003	H-PPGNSGEETIGEAFE-OH	-	+	-	+
21168_04	SIVmac239 Vpx_004	H-SGEETIGEAFEWLNROH	-	+	-	+
21168_05	SIVmac239 Vpx_005	H-TIGEAFEWLNRTVEE-OH	-	+	-	+
21168_06	SIVmac239 Vpx_006	H-AFEWLNRTVEEINRE-OH	-	+	-	+
21168_07	SIVmac239 Vpx_007	H-LNRTVEEINREAVNH-OH	-	-	-	+
21168_08_W1	SIVmac239 Vpx_008	H-VEEINREAVNHLPRE-OH	-	+	-	+
21168_09	SIVmac239 Vpx_009	H-NREAVNHLPRELIFQ-OH	-	-	-	+
21168_10	SIVmac239 Vpx_010	H-VNHLPRELIFQVWQR-OH	-	-	-	+
21168_11	SIVmac239 Vpx_011	H-PRELIFQVWQRSWEY-OH	-	-	-	+
21168_12	SIVmac239 Vpx_012	H-IFQVWQRSWEYWHDE-OH	-	-	-	+
21168_13	SIVmac239 Vpx_013	H-WQRSWEYWHDEQGMS-OH	-	-	-	+
21168_14	SIVmac239 Vpx_014	H-WEYWHDEQGMSPSYV-OH	-	-	-	+
21168_15	SIVmac239 Vpx_015	H-HDEQGMSPSYVKYRY-OH	-	-	-	+
21168_16	SIVmac239 Vpx_016	H-GMSPSYVKYRYLCLI-OH	-	-	-	+
21168_17	SIVmac239 Vpx_017	H-SYVKYRYLCLIQKAL-OH	-	-	-	+
21168_18_W3	SIVmac239 Vpx_018	H-YRYLCLIQKALFMHC-OH	-	-	-	+
21168_19_W2	SIVmac239 Vpx_019	H-CLIQKALFMHCKKGC-OH	-	-	-	+
21168_20	SIVmac239 Vpx_020	H-KALFMHCKKGCRCCLG-OH	-	-	-	+
21168_21	SIVmac239 Vpx_021	H-MHCKKGCRCCLGEGHG-OH	-	-	-	+
21168_22_W1	SIVmac239 Vpx_022	H-KGCRCCLGEGHGAGGW-OH	-	-	-	+
21168_23	SIVmac239 Vpx_023	H-CLGEGHGAGGWRPGR-OH	-	-	-	+
21168_24	SIVmac239 Vpx_024	H-GHGAGGWRPGPPPPP-OH	+	-	+	+
21168_25	SIVmac239 Vpx_025	H-GGWRPGPPPPPPGL-OH	+	-	+	+
21168_26_W1	SIVmac239 Vpx_026	H-PGPPPPPPGLA-OH	+	-	+	+

determination of solubility: 0.25 mg of the respective peptide was incubated with 1ml of solvent. Solubility was assessed by visual inspection of the resulting solution/ suspension.

"+": complete dissolution

"-": incomplete dissolution



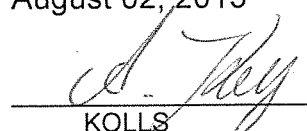
## Analytical Data Sheet

JE.# 21168\_01  
PO.#  
Customer Fisher BioServices Inc.  
Dr. Bruce Brown  
Product SIVmac239 Vpx\_001  
Sequence H-MSDPRERIPPGNSGE-OH  
Amount 1,0 mg (net)  
Batch no. 030613Y-21  
Molecular weight (net) 1641,78 g/mol

Tests	Results
Appearance	lyophilized material
MS	1643.6 [M+H] <sup>+</sup> ESI 821.4 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient)(mixture of cis/trans isomeres) (see raw data enclosed)
AAA calcd.	D:2 E:2 G:2 I:1 M:1 P:3 R:2 S*:2
AAA found	D:1.9 E:2.0 G:2.0 I:1.0 M:0.9 P:3.2 R:2.0 S*:1.4 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	79%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

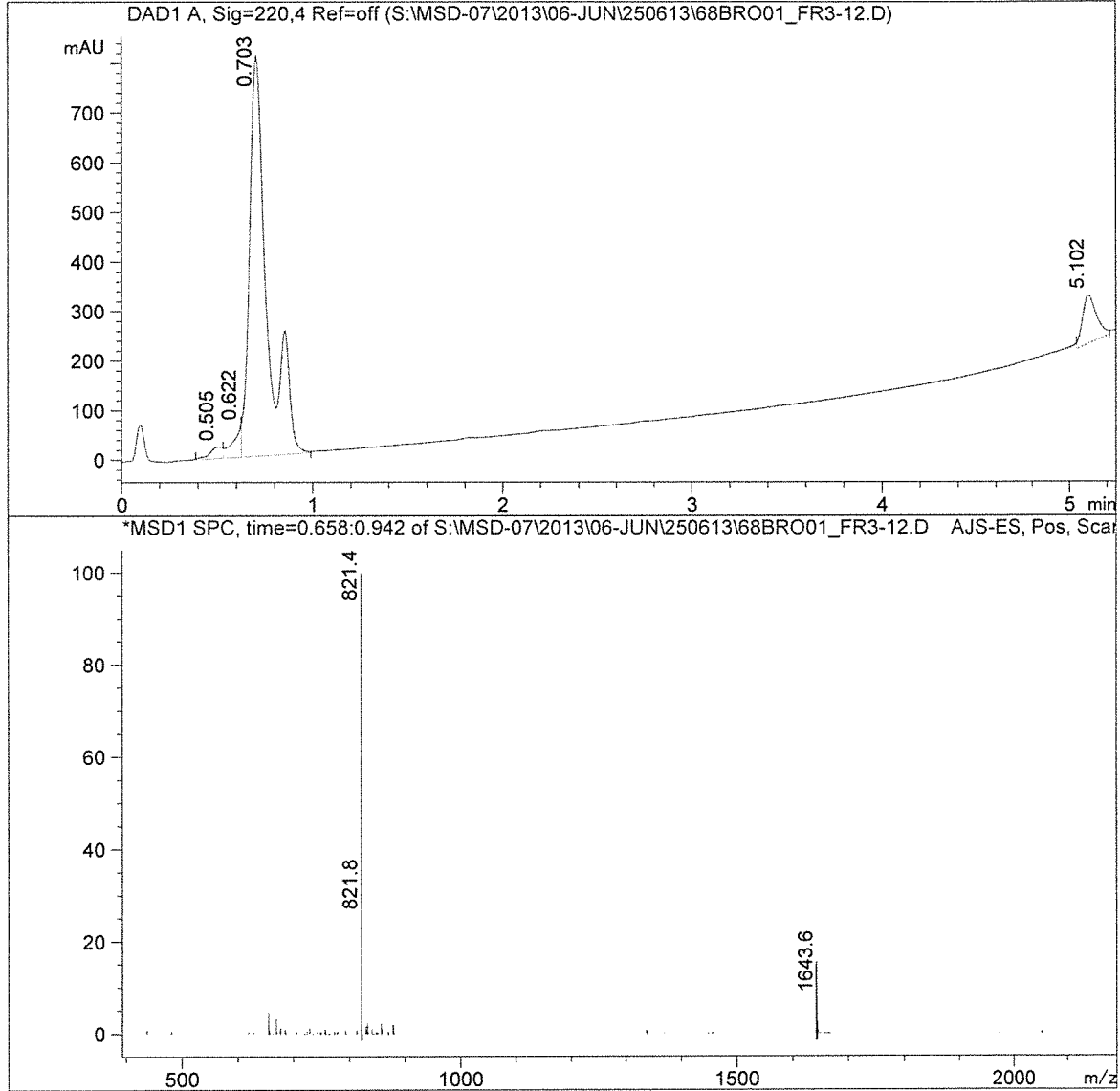
  
KOLLS

(Analytical Data see next pages)

Injection Date : Tue, 25. Jun. 2013  
Sample Name :  
Acq Operator : SYSTEM  
Acq. Method : D:\METHODS\5-95-6M.M  
column used :  
Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
Cat#6450\_SIVmac239\_Vpx001  
Lot# 21168  
JPT Lot# 030613Y-21

Sample Info : no sample info provided

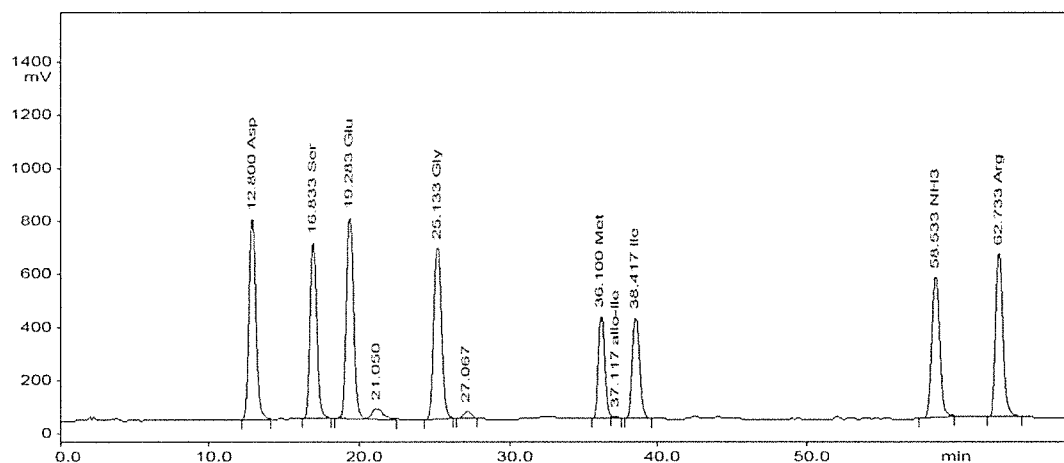


Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	0.505	0.1	112.2	1.9
2	0.622	0.1	200.5	3.4
3	0.703	0.1	5131.9	86.3
4	5.102	0.1	504.1	8.5

\*\*\* End of Report \*\*\*

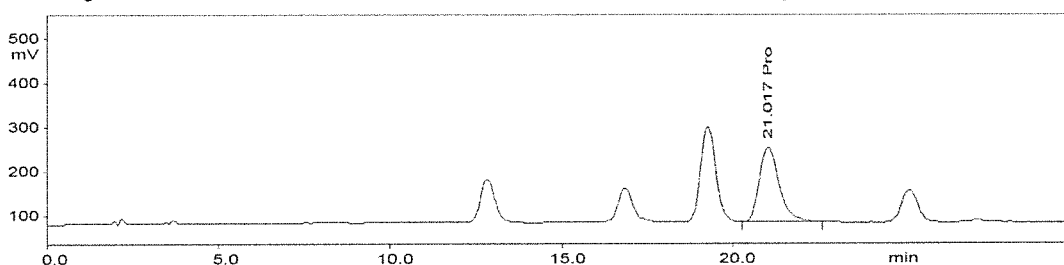
Sample Identifier: 21168\_01  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700025  
 Injected on: 05.07.2013 Injected at: 21:30



Calculation Method : External Standard  
 Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.800	10648454	415.067
2	Ser	16.833	9138461	308.775
3	Glu	19.283	11484515	436.353
4		21.050	909984	0.000
5	Gly	25.133	10561106	420.938
6		27.067	440926	0.000
7	Met	36.100	5111458	194.613
8	allo-Ile	37.117	69845	2.757
9	Ile	38.417	5895060	211.720
10	NH3	58.533	8749525	322.894
11	Arg	62.733	9535361	434.342

Sample Identifier: 21168\_01  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-4400025



Calculation Method : External Standard  
 Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	21.017	3480217	681.443



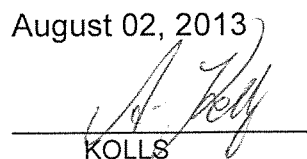
## Analytical Data Sheet

JE.# 21168\_02  
PO.#  
Customer Fisher BioServices Inc.  
Dr. Bruce Brown  
Product Sequence SIVmac239 Vpx\_002  
H-RERIPPGNSGEETIG-OH  
Amount 1,0 mg (net)  
Batch no. 030613Y-22  
Molecular weight (net) 1611,72 g/mol

Tests	Results
Appearance	lyophilized material
MS	1613.6 [M+H] <sup>+</sup> ESI 806.4 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient)(mixture of cis/trans isomeres) (see raw data enclosed)
AAA calcd.	D:1 E:3 G:3 I:2 P:2 R:2 S*:1 T*:1
AAA found	D:1.0 E:3.0 G:3.0 I:2.0 P:2.1 R:2.0 S*:0.7 T*:0.9 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	79%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

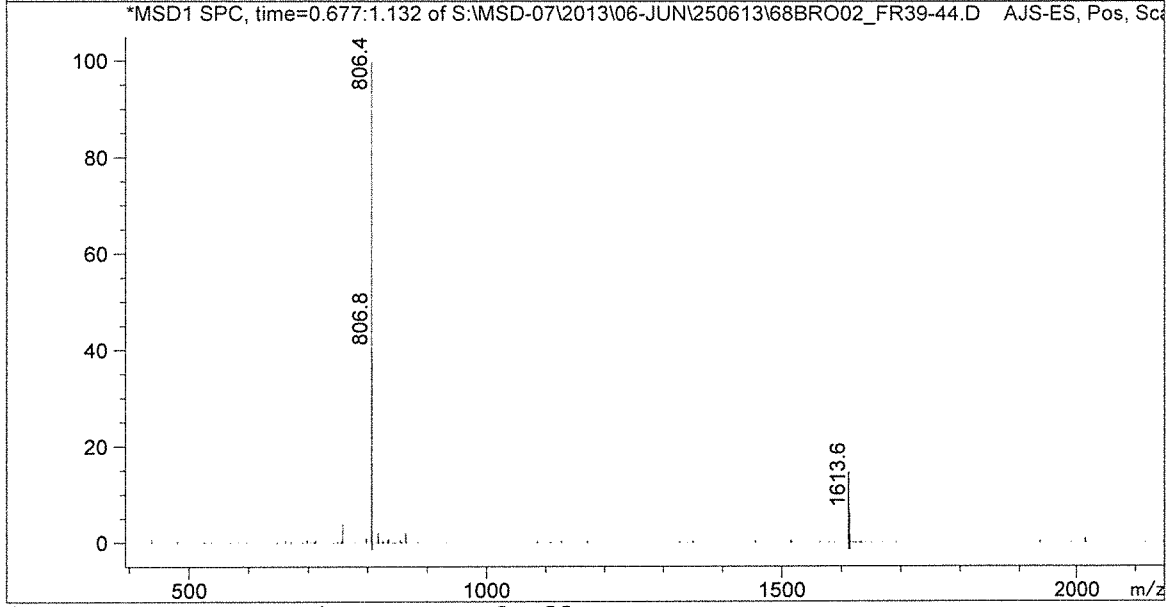
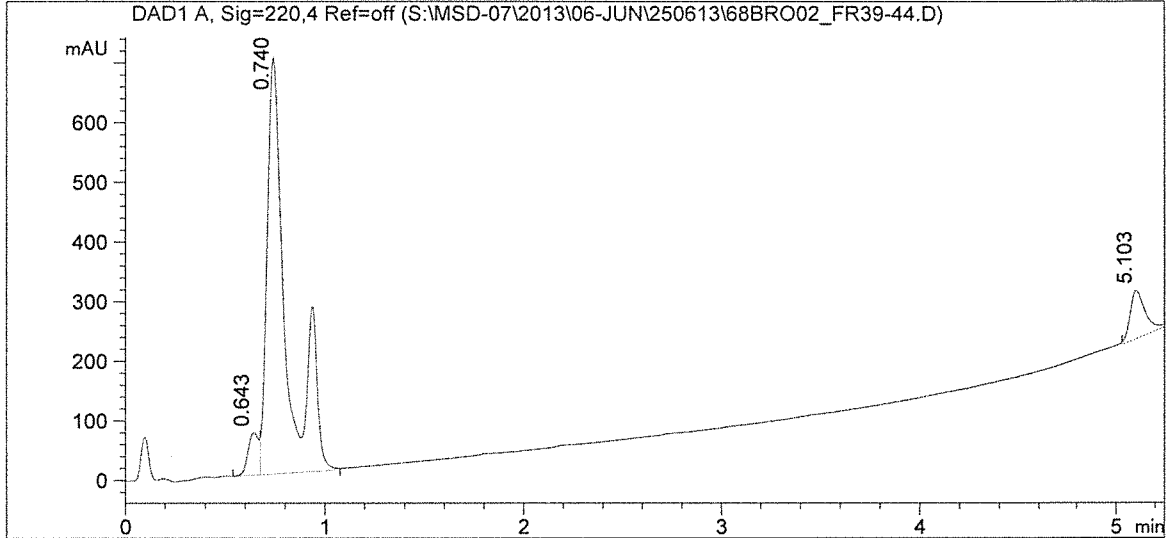
Quality control:

  
KOLLS

(Analytical Data see next pages)

Injection Date : Tue, 25. Jun. 2013  
Sample Name :  
Acq Operator : SYSTEM  
Acq. Method : D:\METHODS\5-95-6M.M  
column used :  
Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M  
Sample Info : no sample info provided

NIH-ARP  
Cat#6450\_SIVmac239\_Vpx002  
Lot# 21168  
JPT Lot# 030613Y-22



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	0.643	0.1	279.6	5.2
2	0.740	0.1	4662.5	86.6
3	5.103	0.1	442.0	8.2

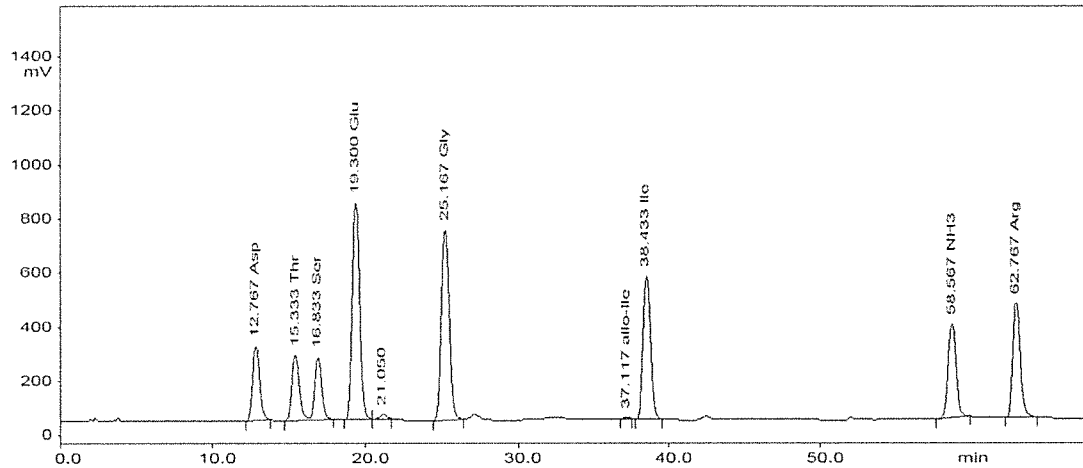
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_02

Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700026

Injected on: 05.07.2013

Injected at: 23:14



Calculation Method : External Standard

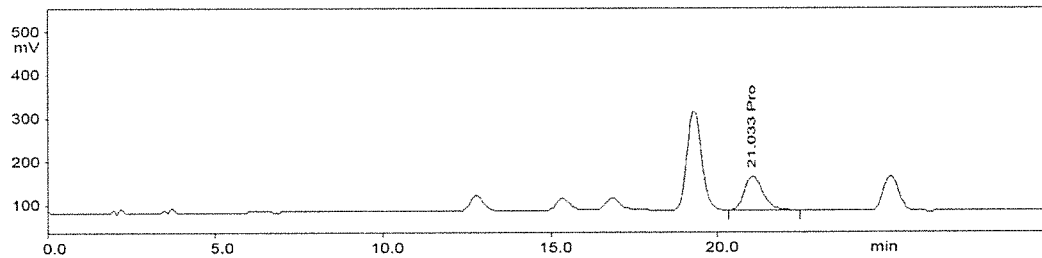
Calibration Method : One Point

Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.767	3921240	305.693
2	Thr	15.333	3712208	272.723
3	Ser	16.833	3261024	220.371
4	Glu	19.300	12079354	917.907
5		21.050	315096	0.000
6	Gly	25.167	11547531	920.508
7	allo-Ile	37.117	88079	6.957
8	Ile	38.433	8230527	591.471
9	NH3	58.567	5870596	433.299
10	Arg	62.767	6564468	598.031

Sample Identifier: 21168\_02

Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-4400026



Calculation Method : External Standard

Calibration Method : One Point

Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	21.033	1614451	632.234

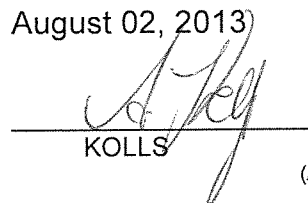
## Analytical Data Sheet

**JE.#** 21168\_03  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_003  
 H-PPGNSGEETIGEAFFE-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 030613Y-23  
**Molecular weight (net)** 1533,55 g/mol

Tests	Results
Appearance	lyophilized material
MS	1533.5 [M+H] <sup>+</sup> ESI 767.8 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 D:1 E:4 F:1 G:3 I:1 P:2 S*:1 T*:1
AAA found	A:1.2 D:1.0 E:4.1 F:1.0 G:3.0 I:1.0 P:1.9 S*:0.7 T*:0.9 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	86%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013)

Quality control:

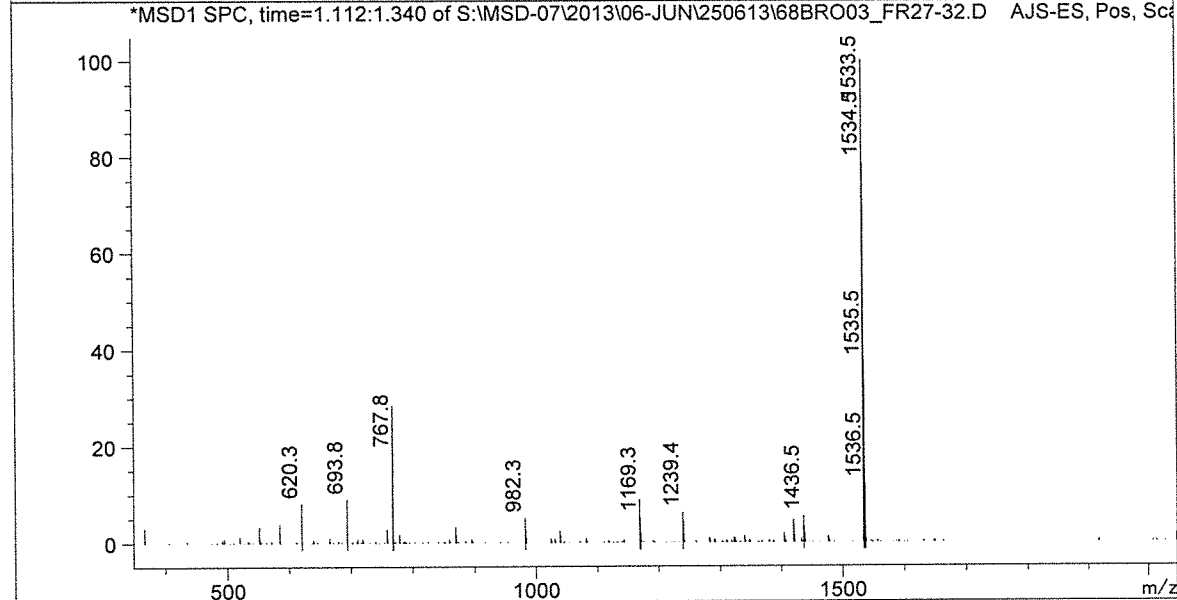
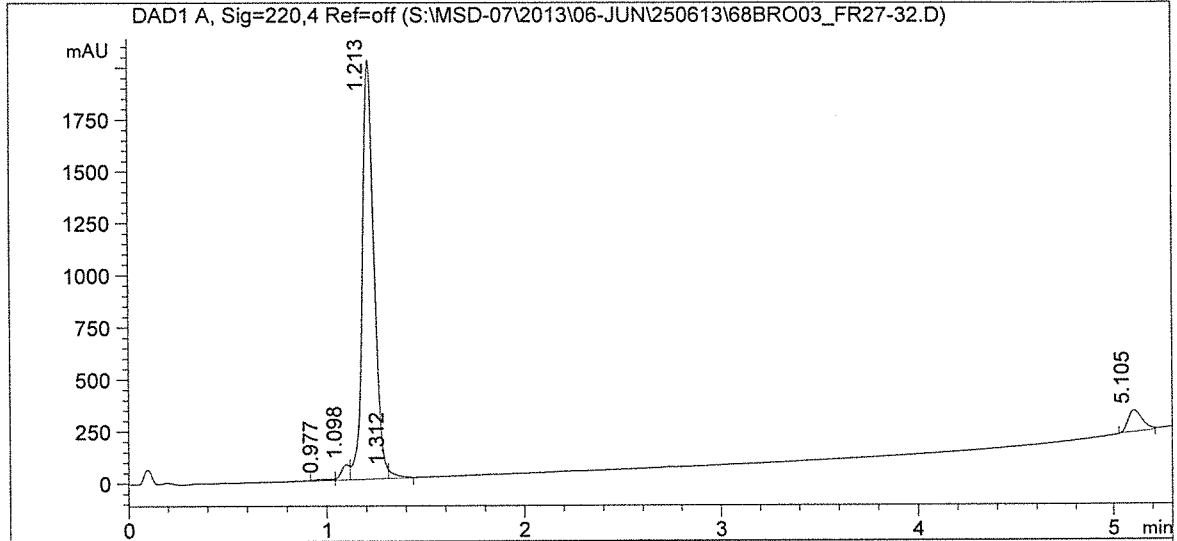
  
 KOLLS

(Analytical Data see next pages)



Injection Date : Tue, 25. Jun. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M  
 Sample Info : no sample info provided

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx003  
 Lot# 21168  
 JPT Lot# 030613Y-23

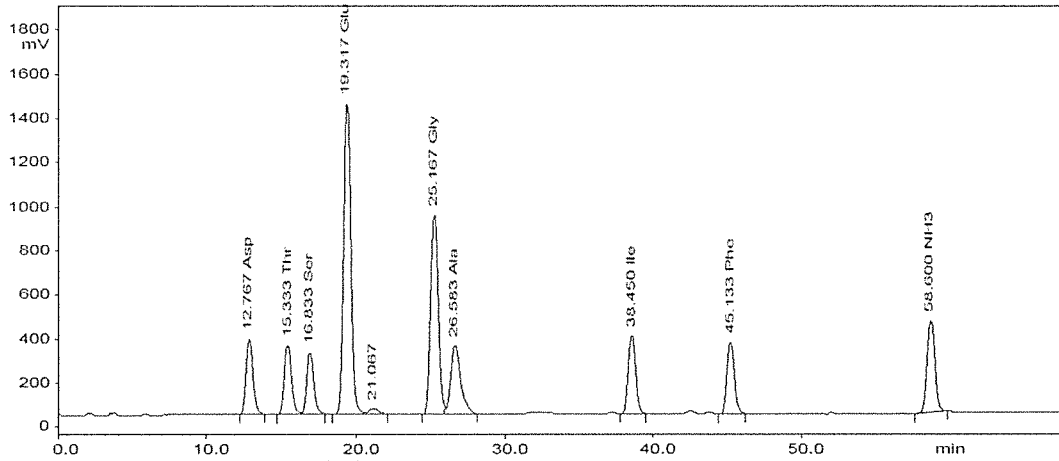


Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	0.977	0.1	47.3	0.5
2	1.098	0.1	231.3	2.5
3	1.213	0.1	8191.9	90.3
4	1.312	0.0	91.5	1.0
5	5.105	0.1	513.4	5.7

\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_03  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700027  
 Injected on: 06.07.2013 Injected at: 00:57



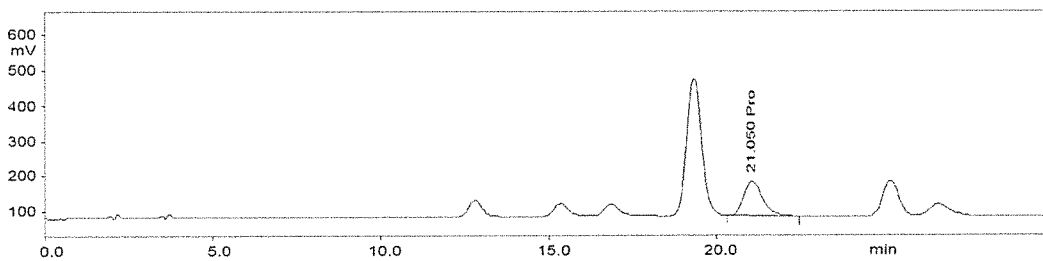
Calculation Method : External Standard

Calibration Method : One Point

Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.767	4863812	379.174
2	Thr	15.333	4814403	353.698
3	Ser	16.833	3942059	266.393
4	Glu	19.317	21172116	1608.864
5		21.067	517606	0.000
6	Gly	25.167	14892830	1187.178
7	Ala	26.583	6637160	488.274
8	Ile	38.450	5493084	394.750
9	Phe	45.133	5067792	408.415
10	NH3	58.600	7053566	520.612

Sample Identifier: 21168\_03  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-4400027



Calculation Method : External Standard

Calibration Method : One Point

Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	21.050	1937791	758.857

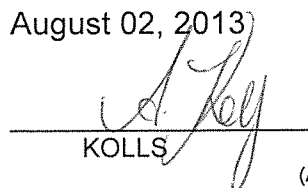
## Analytical Data Sheet

**JE.#** 21168\_04  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_004  
 H-SGEETIGEA FEWLN R-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 030613Y-24  
**Molecular weight (net)** 1737,82 g/mol

Tests	Results
Appearance	lyophilized material
MS	1737.7 [M+H] <sup>+</sup> ESI 869.4 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 D:1 E:4 F:1 G:2 I:1 L:1 R:1 S*:1 T*:1 W*:1
AAA found	A:1.2 D:1.0 E:4.0 F:1.0 G:2.0 I:1.0 L:1.0 R:1.0 S*:0.7 T*:0.9 W*:0.6 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	84%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

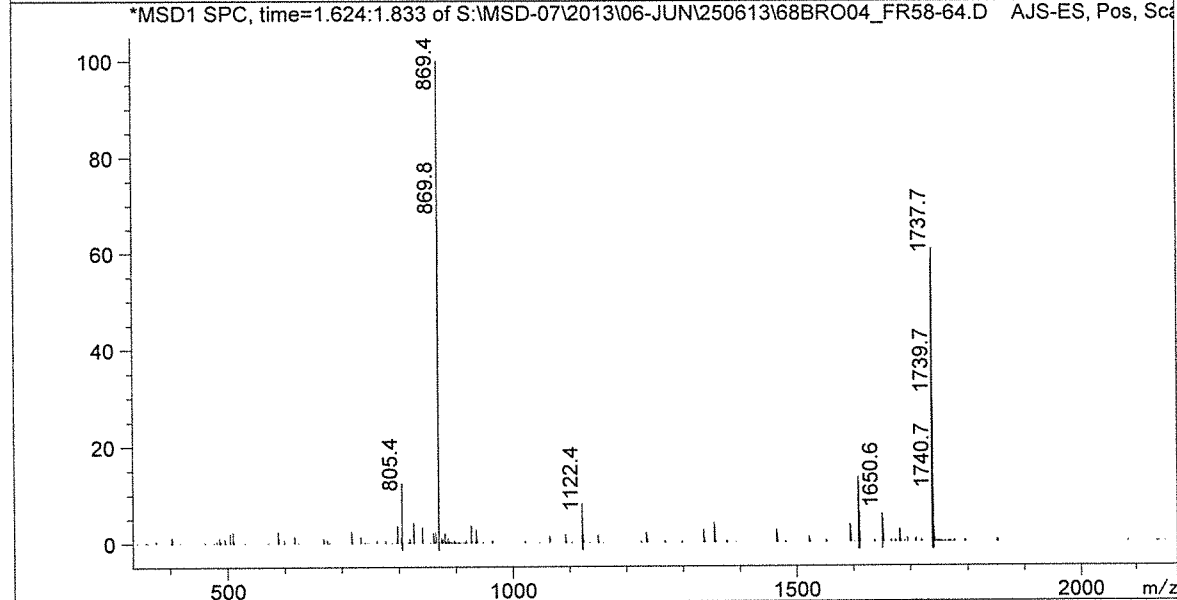
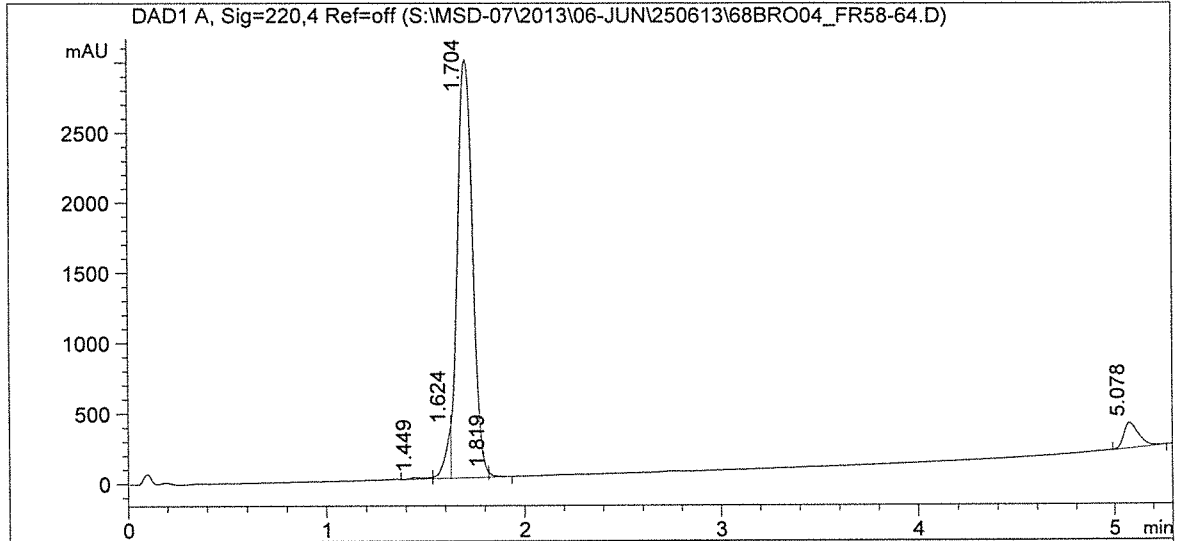
Quality control:

  
 KOLLS

(Analytical Data see next pages)

Injection Date : Tue, 25. Jun. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M  
 Sample Info : no sample info provided

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx004  
 Lot# 21168  
 JPT Lot# 030613Y-24



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.449	0.1	63.1	0.4
2	1.624	0.0	814.4	4.6
3	1.704	0.1	15689.0	89.4
4	1.819	0.0	40.4	0.2
5	5.078	0.1	951.5	5.4

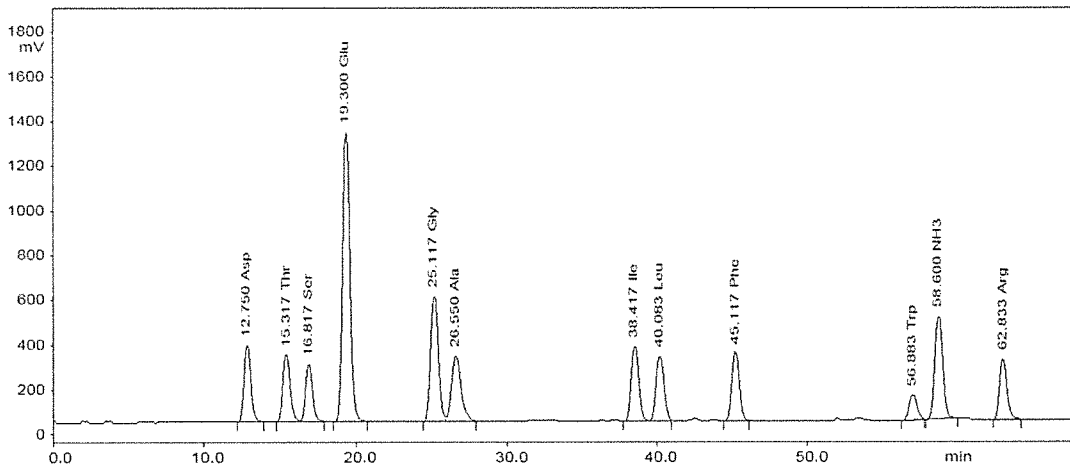
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_04

Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700028

Injected on: 06.07.2013

Injected at: 02:40



Calculation Method : External Standard

Calibration Method : One Point

Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.750	4816182	375.461
2	Thr	15.317	4550523	334.311
3	Ser	16.817	3595235	242.956
4	Glu	19.300	19348892	1470.318
5	Gly	25.117	9147727	729.209
6	Ala	26.550	5957749	438.292
7	Ile	38.417	5148737	370.004
8	Leu	40.083	4843593	372.830
9	Phe	45.117	4784095	385.552
10	Trp	56.883	1892292	240.764
11	NH3	58.600	7675376	566.507
12	Arg	62.833	4071343	370.905



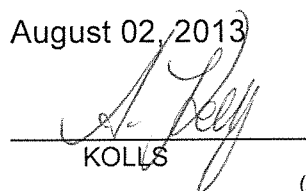
## Analytical Data Sheet

JE.# 21168\_05  
PO.#  
Customer Fisher BioServices Inc.  
Dr. Bruce Brown  
Product SIVmac239 Vpx\_005  
Sequence H-TIGEAFEWLNRTVEE-OH  
Amount 1,0 mg (net)  
Batch no. 030613Y-27  
Molecular weight (net) 1793,92 g/mol

Tests	Results
Appearance	lyophilized material
MS	1793.7 [M+H] <sup>+</sup> ESI 897.9 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 D:1 E:4 F:1 G:1 I:1 L:1 R:1 T*:2 V:1 W*:1
AAA found	A:1.0 D:1.0 E:3.9 F:1.0 G:1.0 I:1.0 L:1.0 R:1.0 T*:1.6 V:1.0 W*:0.8 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	86%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

  
KOLLS

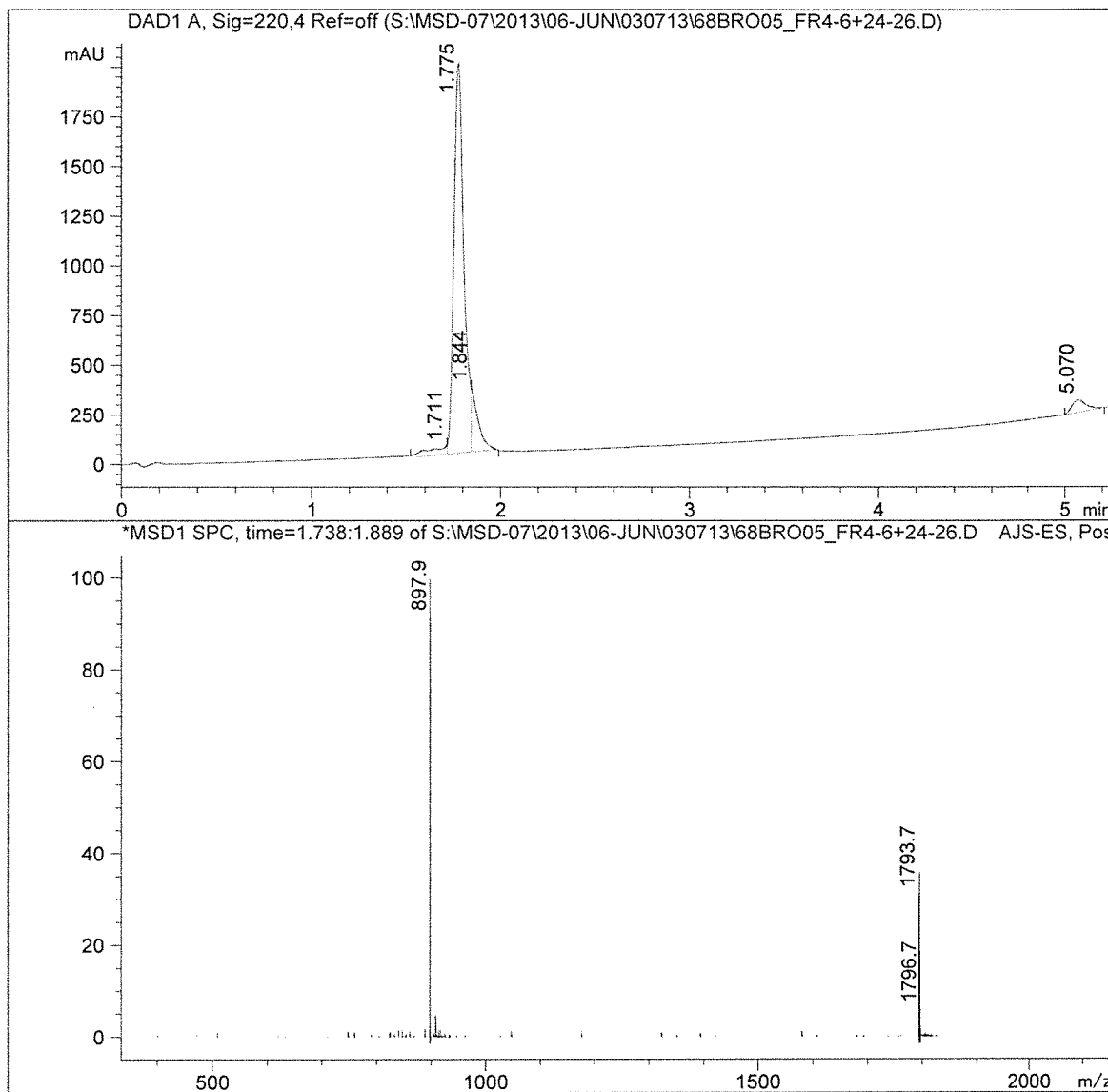
(Analytical Data see next pages)



Injection Date : Wed, 3. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx005  
 Lot# 21168  
 JPT Lot# 030613Y-27

Sample Info : no sample info provided



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.711	0.1	318.0	3.7
2	1.775	0.1	7222.5	83.7
3	1.844	0.0	751.9	8.7
4	5.070	0.1	340.4	3.9

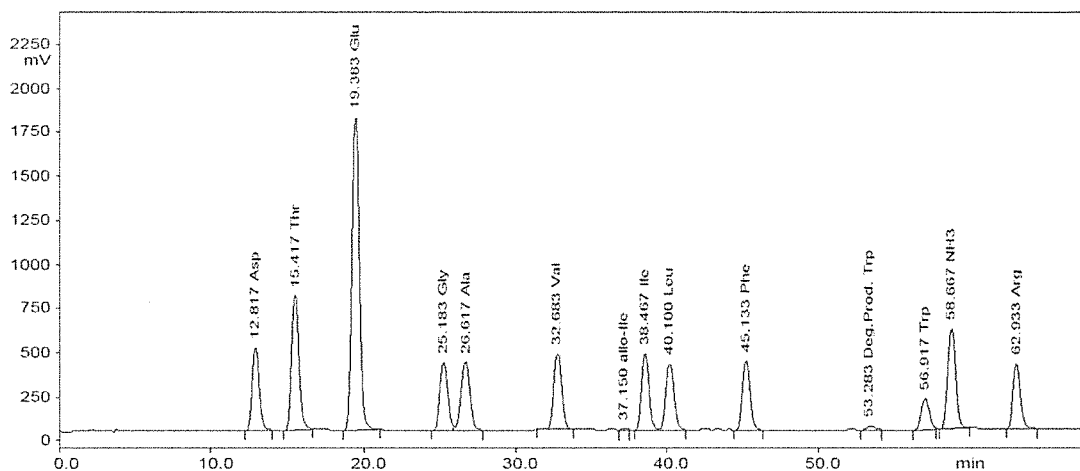
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_05

Chromatogram: I:\JPT\Proben\2013\1307\130709\ASA1\Chromatogramme2\A1-5700056

Injected on: 11.07.2013

Injected at: 10:56



Calculation Method : External Standard

Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.817	6772371	272.568
2	Thr	15.417	11490357	432.991
3	Glu	19.383	26747718	1038.368
4	Gly	25.183	6454457	257.391
5	Ala	26.617	7310800	270.844
6	Val	32.683	7450646	257.571
7	allo-Ile	37.150	66519	2.720
8	Ile	38.467	6768143	251.369
9	Leu	40.100	6566058	263.988
10	Phe	45.133	6169481	266.686
11	Deg. Prod. Trp	53.283	411323	18.941
12	Trp	56.917	2998496	196.780
13	NH3	58.667	9386233	341.058
14	Arg	62.933	5694999	262.386



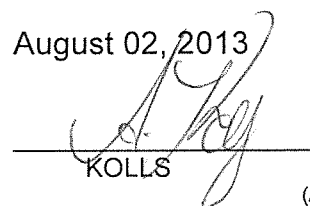
## Analytical Data Sheet

**JE.#** 21168\_06  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_006  
 H-AFEWLNRTVEEINRE-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 030613Y-28  
**Molecular weight (net)** 1906,06 g/mol

Tests	Results
Appearance	lyophilized material
MS	1906.8 [M+H] <sup>+</sup> ESI 953.9 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 D:2 E:4 F:1 I:1 L:1 R:2 T*:1 V:1 W*:1
AAA found	A:1.0 D:2.0 E:4.0 F:1.0 I:1.0 L:1.0 R:2.0 T*:0.9 V:1.0 W*:0.7 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	82%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

  
 KOLLS

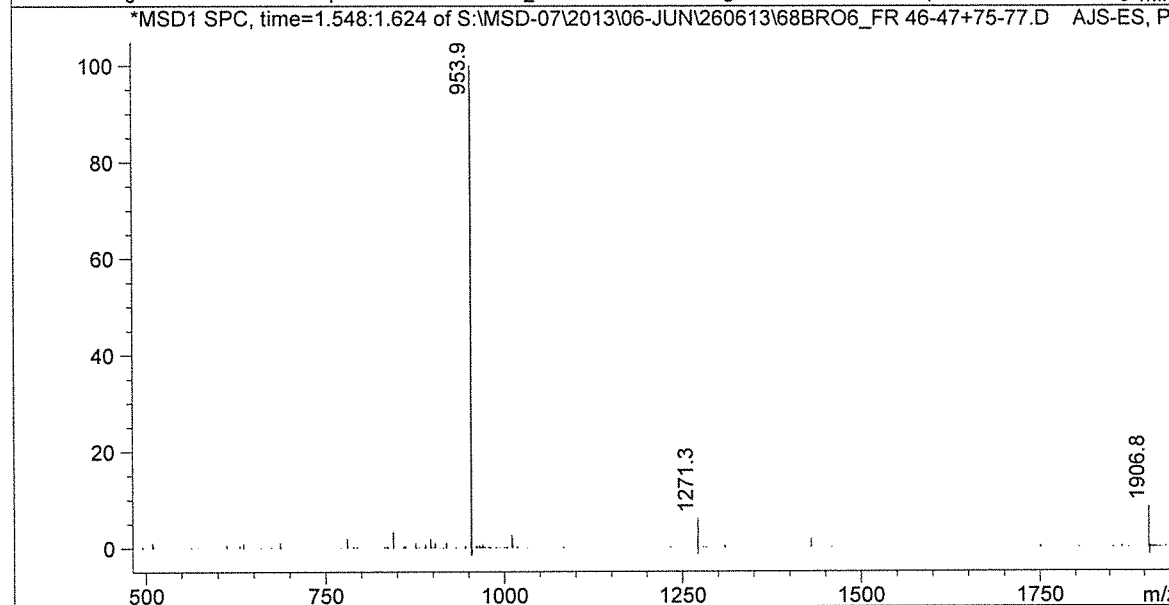
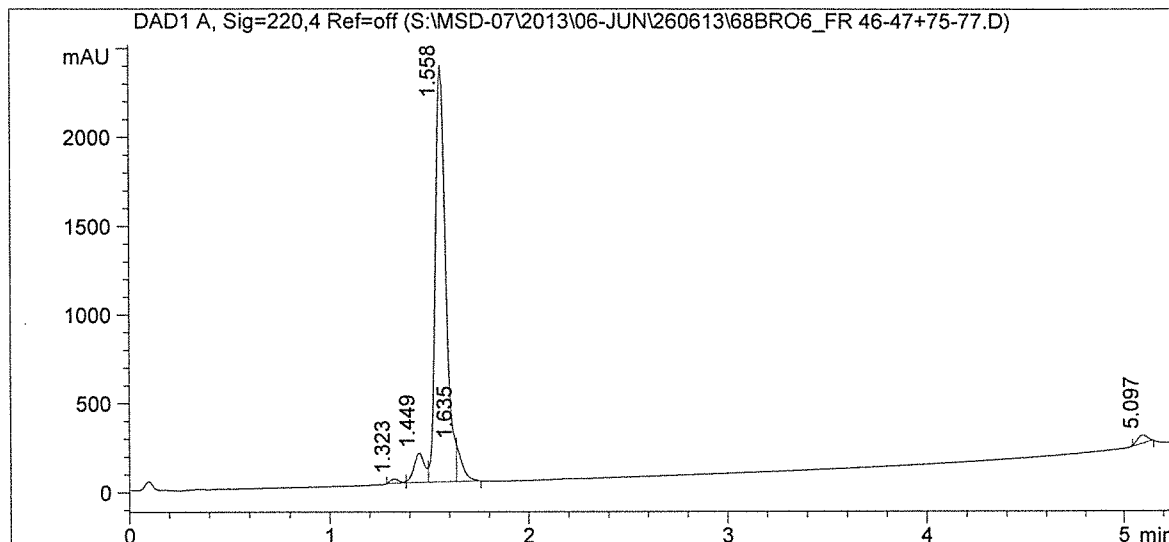
(Analytical Data see next pages)



Injection Date : Wed, 26. Jun. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx006  
 Lot# 21168  
 JPT Lot# 030613Y-28

Sample Info : no sample info provided



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.323	0.1	73.0	0.8
2	1.449	0.1	633.6	6.6
3	1.558	0.1	8411.1	87.2
4	1.635	0.0	369.5	3.8
5	5.097	0.1	158.7	1.6

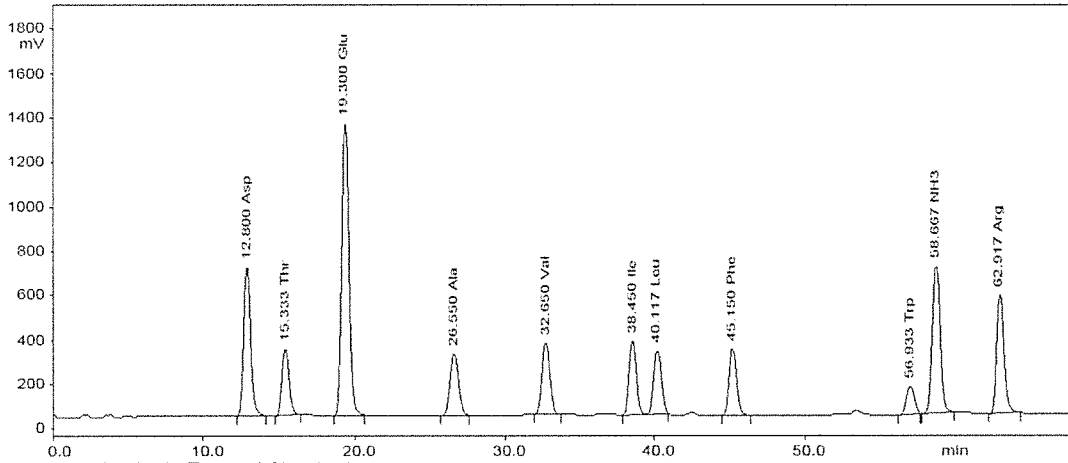
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_06

Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700029

Injected on: 06.07.2013

Injected at: 04:24



Calculation Method : External Standard

Calibration Method : One Point

Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.800	9384949	731.634
2	Thr	15.333	4435480	325.859
3	Glu	19.300	19601746	1489.532
4	Ala	26.550	5073626	373.250
5	Val	32.650	5359077	363.453
6	Ile	38.450	5084595	365.395
7	Leu	40.117	4789623	368.675
8	Phe	45.150	4704238	379.116
9	Trp	56.933	2130087	271.019
10	NH3	58.667	11017664	813.195
11	Arg	62.917	8210924	748.026

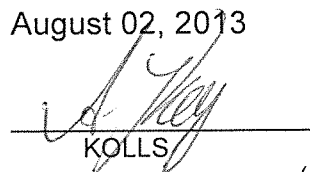
## Analytical Data Sheet

**JE.#** 21168\_07  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_007  
 H-LNRTVEEINREAVNH-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 030613Y-29  
**Molecular weight (net)** 1793,93 g/mol

Tests	Results
Appearance	lyophilized material
MS	1793.8 [M+H] <sup>+</sup> ESI 897.5 [M+2H] <sup>2+</sup> ESI 598.7 [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 D:3 E:3 H:1 I:1 L:1 R:2 T*:1 V:2
AAA found	A:1.0 D:2.9 E:3.1 H:1.0 I:1.0 L:1.0 R:2.0 T*:0.9 V:1.9 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	74%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

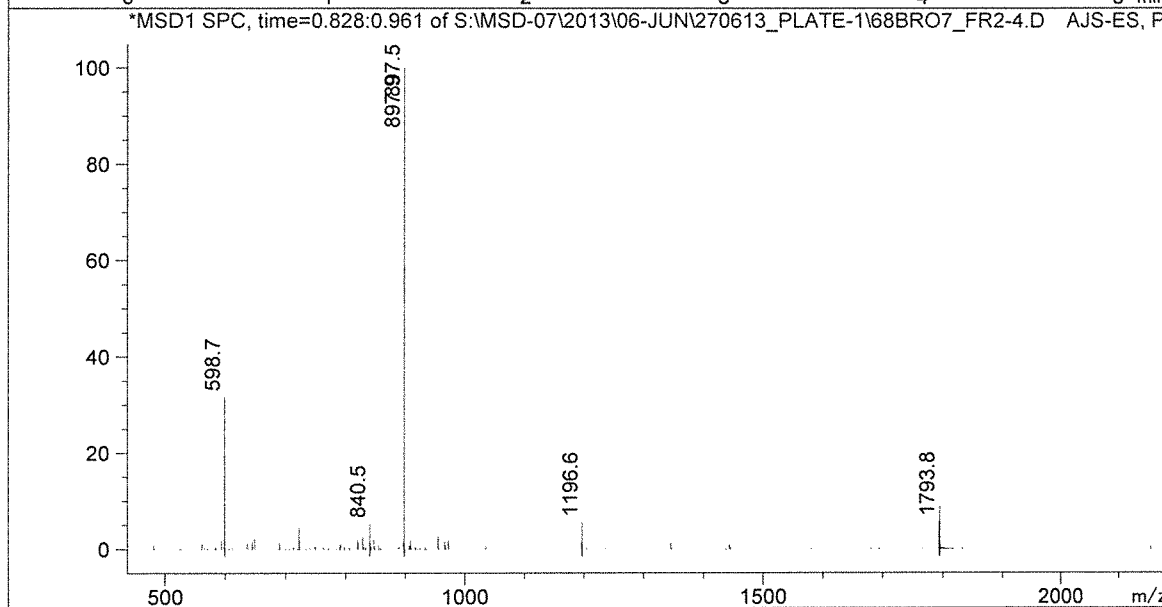
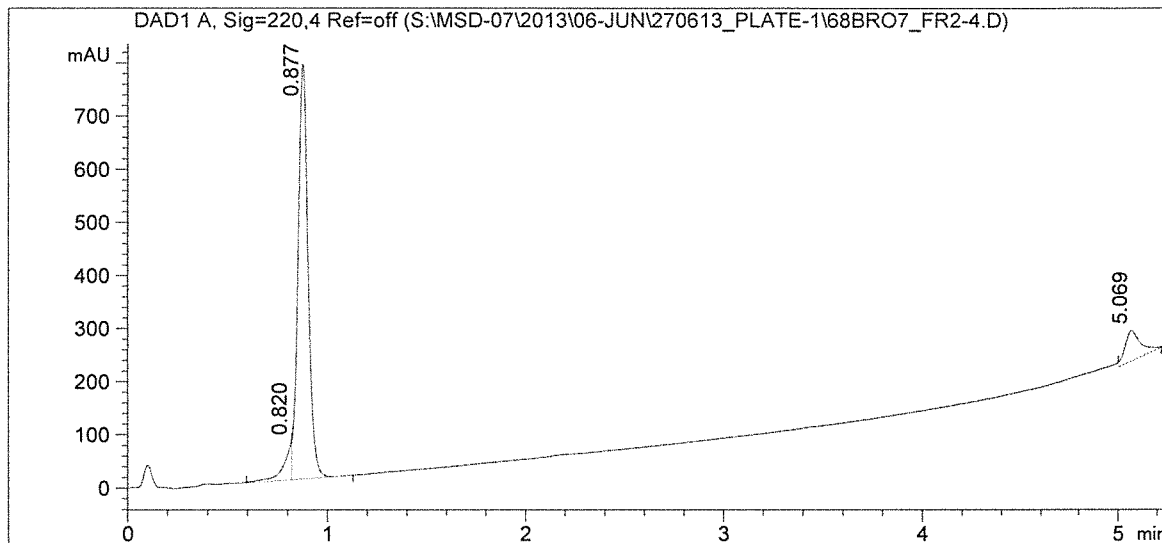
  
 KOLLS

(Analytical Data see next pages)

Injection Date : Thu, 27. Jun. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M-Plate.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx007  
 Lot# 21168  
 JPT Lot# 030613Y-29

Sample Info : no sample info provided



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	0.820	0.1	218.8	6.7
2	0.877	0.1	2723.6	83.7
3	5.069	0.1	313.5	9.6

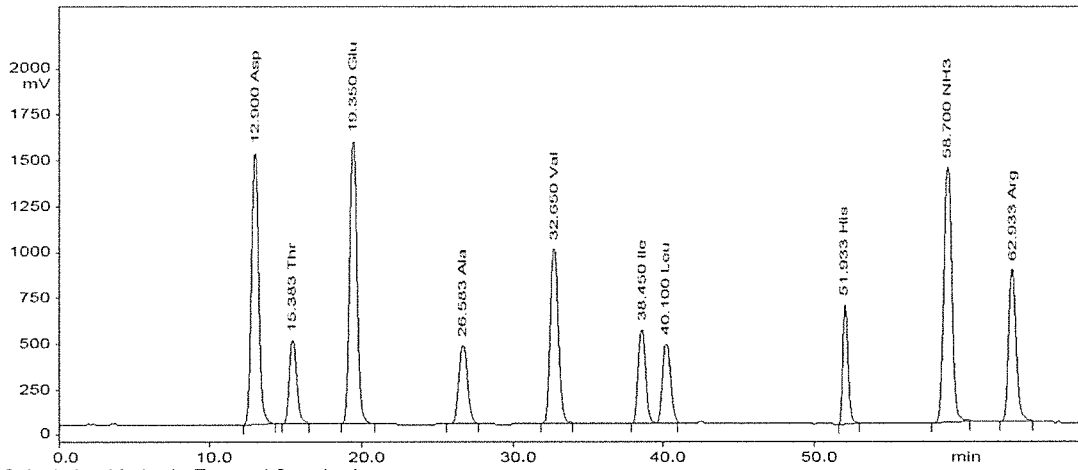
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_07

Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700030

Injected on: 06.07.2013

Injected at: 06:07



Calculation Method : External Standard

Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.900	21123566	823.378
2	Thr	15.383	6849553	251.607
3	Glu	19.350	23094074	877.456
4	Ala	26.583	7863291	289.238
5	Val	32.650	16161492	548.037
6	Ile	38.450	7927615	284.852
7	Leu	40.100	7310482	281.358
8	His	51.933	6486827	283.593
9	NH3	58.700	23181762	855.504
10	Arg	62.933	12753046	580.909

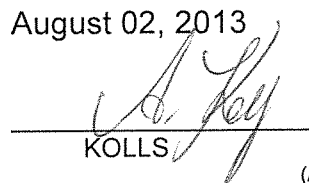
## Analytical Data Sheet

**JE.#** 21168\_08\_W1  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_008  
 H-VEEINREAVNHLPRE-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 030713C4  
**Molecular weight (net)** 1804,96 g/mol

Tests	Results
Appearance	lyophilized material
MS	1804.9 [M+H] <sup>+</sup> ESI 903 [M+2H] <sup>2+</sup> ESI 602.4 [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 D:2 E:4 H:1 I:1 L:1 P:1 R:2 V:2
AAA found	A:1.0 D:2.0 E:4.0 H:1.0 I:0.9 L:1.0 P:1.0 R:2.0 V:1.9 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	79%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

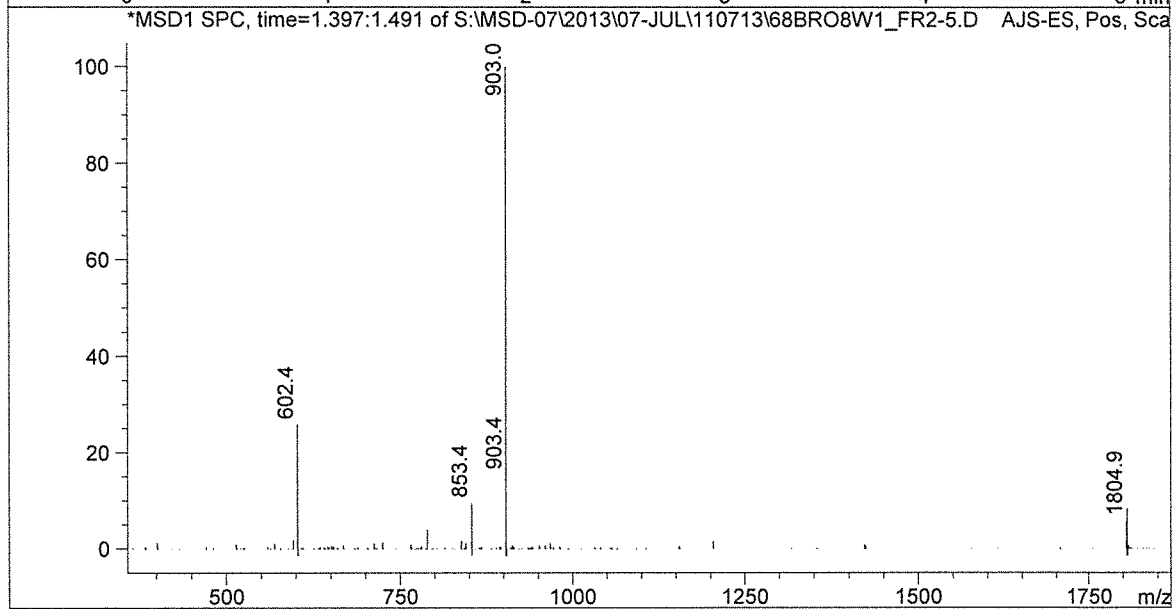
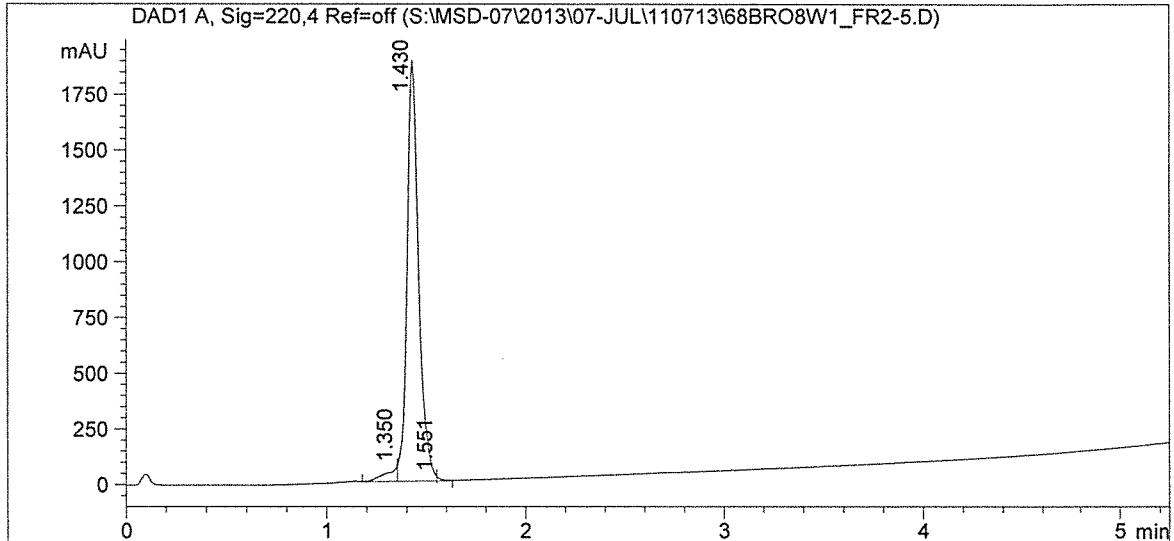
Quality control:

  
 KOLLS

(Analytical Data see next pages)

Injection Date : Thu, 11. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M  
 Sample Info : no sample info provided

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx008  
 Lot# 21168  
 JPT Lot# 030713C4



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.350	0.1	275.4	3.5
2	1.430	0.1	7626.3	96.2
3	1.551	0.0	29.5	0.4

\*\*\* End of Report \*\*\*

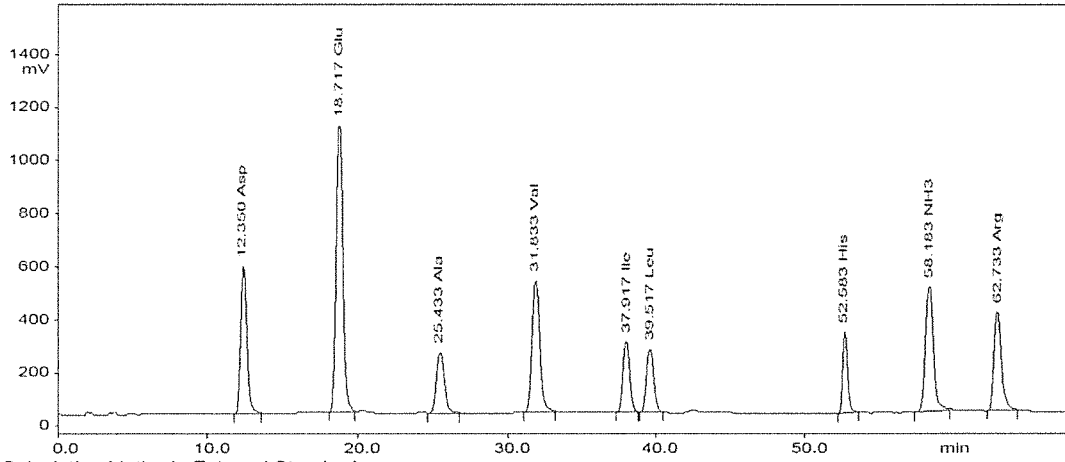


Sample Identifier: 21168\_08

Chromatogram: I:\JPT\Proben\2013\1307\130718\ASA1\Chromatogramme\A1-5700131

Injected on: 19.07.2013

Injected at: 19:48



Calculation Method : External Standard

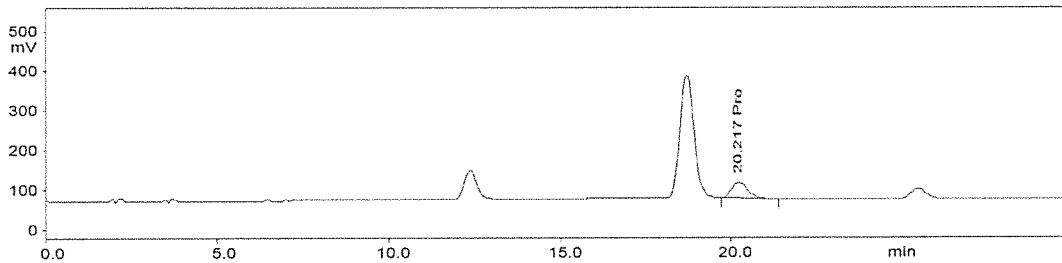
Calibration Method : One Point

Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.350	7008192	567.683
2	Glu	18.717	14816247	1148.727
3	Ala	25.433	3850801	274.946
4	Val	31.833	8057985	543.395
5	Ile	37.917	3698901	270.137
6	Leu	39.517	3651185	286.945
7	His	52.583	2854346	293.990
8	NH3	58.183	7791063	580.298
9	Arg	62.733	5882266	575.433

Sample Identifier: 21168\_08

Chromatogram: I:\JPT\Proben\2013\1307\130718\ASA1\Chromatogramme\A1-4400131



Calculation Method : External Standard

Calibration Method : One Point

Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	20.217	685434	279.003

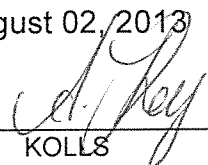
## Analytical Data Sheet

**JE.#** 21168\_09  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_009  
 H-NREAVNHLPRELIFQ-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 030613Y-31  
**Molecular weight (net)** 1836,08 g/mol

Tests	Results
Appearance	lyophilized material
MS	1835.9 [M+H] <sup>+</sup> ESI 919 [M+2H] <sup>2+</sup> ESI 612.8 [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 D:2 E:3 F:1 H:1 I:1 L:2 P:1 R:2 V:1
AAA found	A:1.0 D:2.0 E:3.1 F:1.0 H:1.0 I:1.0 L:2.0 P:1.0 R:2.0 V:1.0 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	78%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

  
 KOLLS

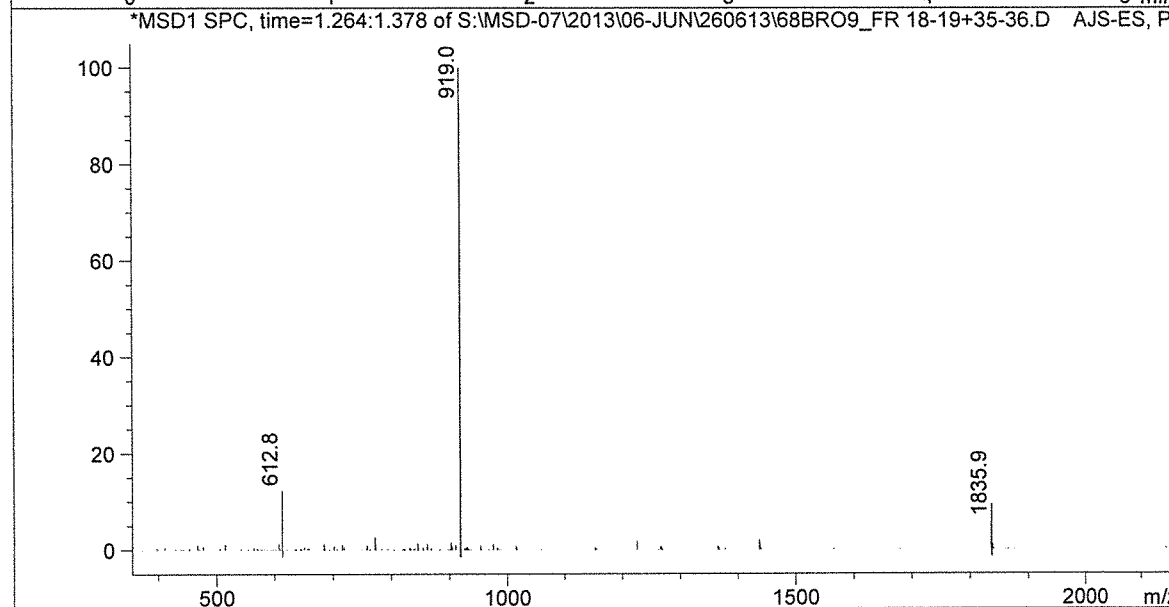
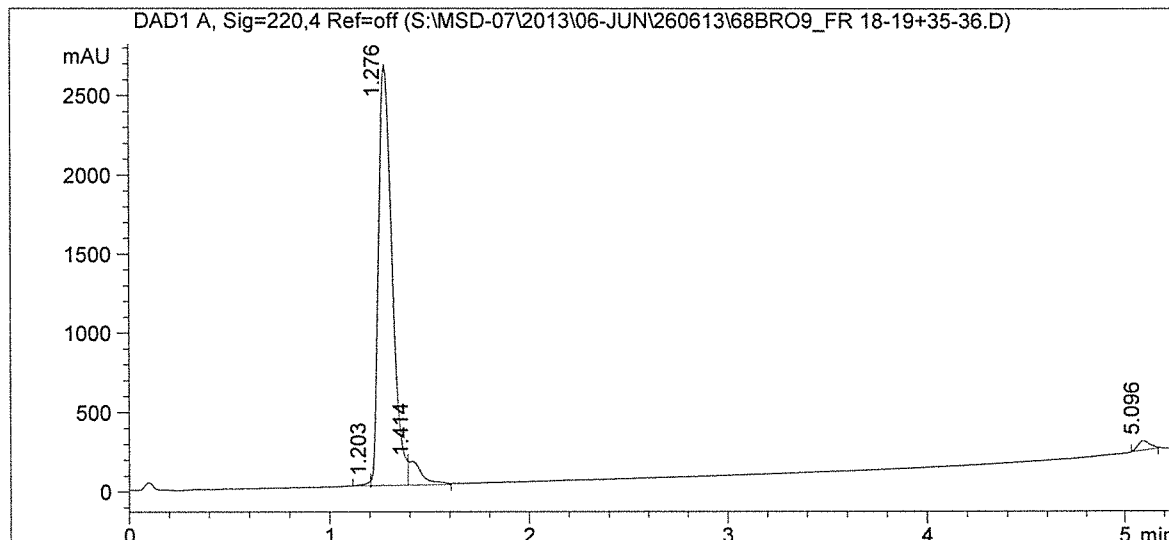
(Analytical Data see next pages)



Injection Date : Wed, 26. Jun. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx009  
 Lot# 21168  
 JPT Lot# 030613Y-31

Sample Info : no sample info provided



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.203	0.0	57.3	0.4
2	1.276	0.1	12437.2	92.5
3	1.414	0.1	709.7	5.3
4	5.096	0.1	247.9	1.8

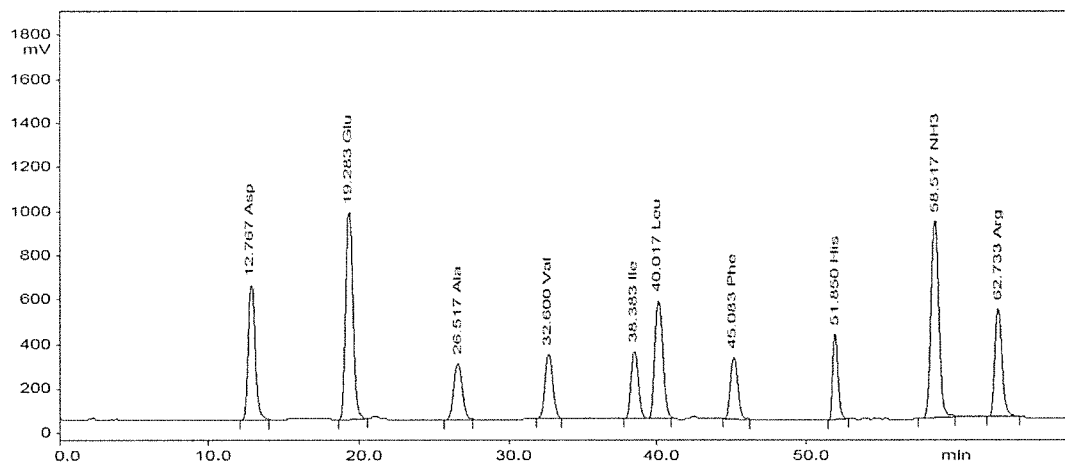
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_09

Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700031

Injected on: 06.07.2013

Injected at: 07:50



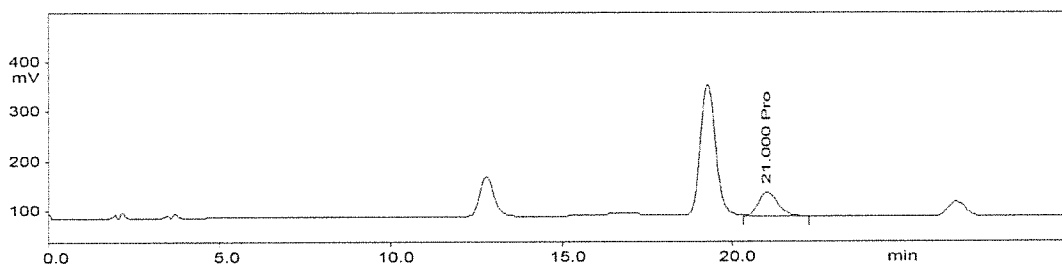
Calculation Method : External Standard

Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.767	8661590	337.621
2	Glu	19.283	14050932	533.863
3	Ala	26.517	4574602	168.269
4	Val	32.600	4895210	165.997
5	Ile	38.383	4693558	168.647
6	Leu	40.017	9035727	347.757
7	Phe	45.083	4348355	175.218
8	His	51.850	3879132	169.589
9	NH3	58.517	14627080	539.800
10	Arg	62.733	7577047	345.139

Sample Identifier: 21168\_09

Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-4400031



Calculation Method : External Standard

Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	21.000	906917	177.579

## Analytical Data Sheet

**JE.#** 21168\_10  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_010  
 H-VNHLPRELIFQVWQR-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 030613Y-32  
**Molecular weight (net)** 1935,26 g/mol

Tests	Results
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<b>Appearance</b>	lyophilized material
<b>MS</b>	1935.9 [M+H] <sup>+</sup> ESI 968.5 [M+2H] <sup>2+</sup> ESI 645.8 [M+3H] <sup>3+</sup> ESI
<b>Purity</b>	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
<b>AAA calcd.</b>	D:1 E:3 F:1 H:1 I:1 L:2 P:1 R:2 V:2 W*:1
<b>AAA found</b>	D:1.0 E:3.0 F:1.0 H:1.0 I:1.0 L:2.0 P:1.0 R:2.0 V:1.9 W*:0.9 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
<b>Peptide content</b>	80%
<b>Remark</b>	This product is supplied as a trifluoroacetate salt.
<b>Storage conditions:</b>	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

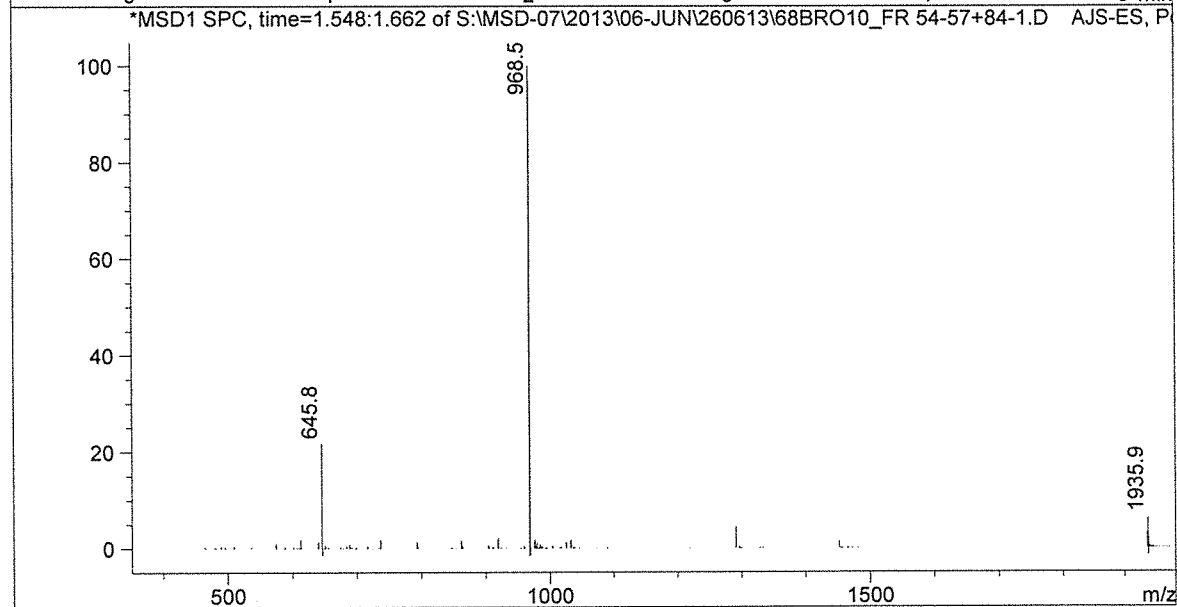
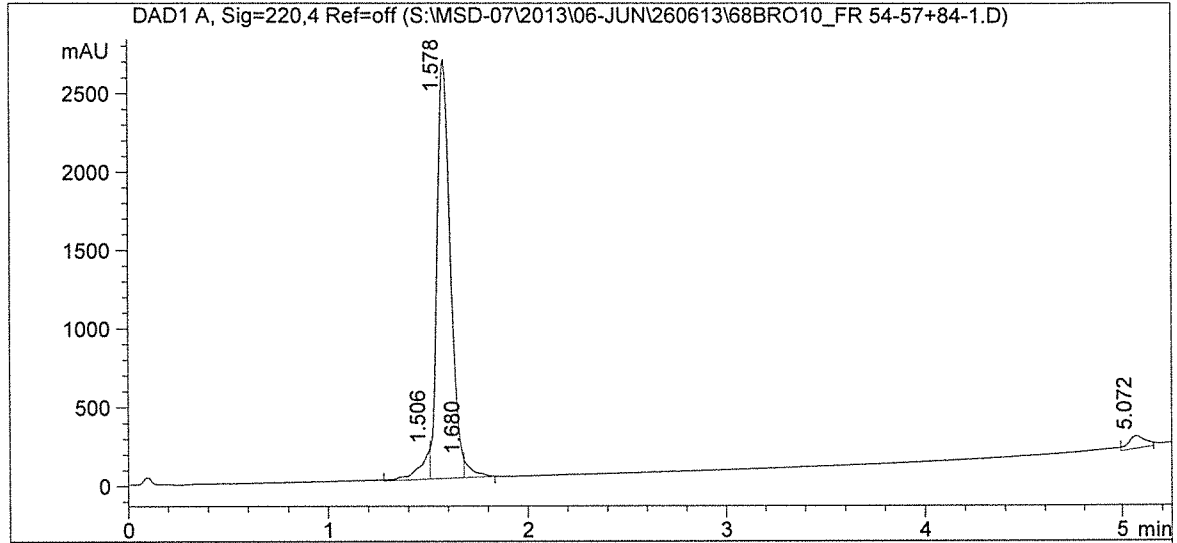
KOLLS

(Analytical Data see next pages)



Injection Date : Wed, 26. Jun. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M  
 Sample Info : no sample info provided

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx010  
 Lot# 21168  
 JPT Lot# 030613Y-32

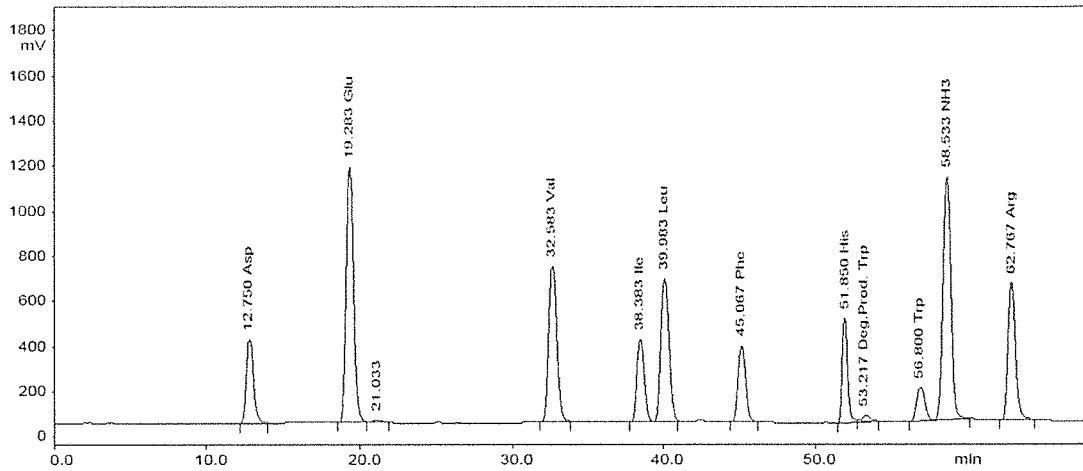


Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.506	0.1	736.7	5.3
2	1.578	0.1	12296.2	89.2
3	1.680	0.0	279.4	2.0
4	5.072	0.1	470.7	3.4

\*\*\* End of Report \*\*\*

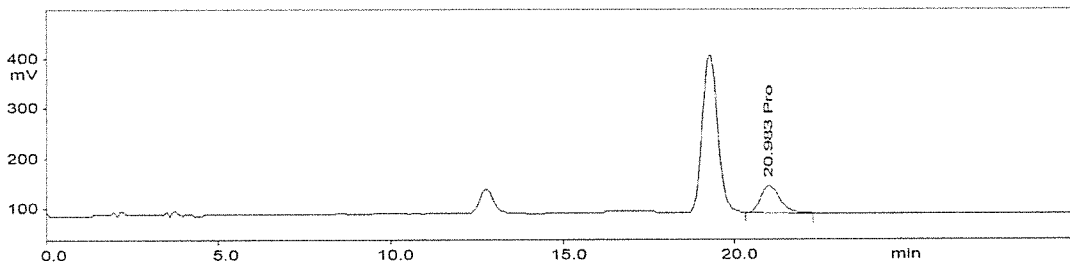
Sample Identifier: 21168\_10  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700032  
 Injected on: 06.07.2013 Injected at: 09:34



Calculation Method : External Standard  
 Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.750	5322736	207.475
2	Glu	19.283	17106180	649.947
3		21.033	272050	0.000
4	Val	32.583	11727642	397.685
5	Ile	38.383	5697418	204.717
6	Leu	39.983	10841816	417.268
7	Phe	45.067	5308629	213.912
8	His	51.850	4957369	216.728
9	Deg.Prod. Trp	53.217	433286	19.637
10	Trp	56.800	2626273	167.076
11	NH3	58.533	17886558	660.088
12	Arg	62.767	9395971	427.992

Sample Identifier: 21168\_10  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-4400032



Calculation Method : External Standard  
 Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	20.983	1076389	210.762



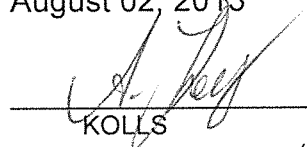
## Analytical Data Sheet

JE.# 21168\_11  
PO.#  
Customer Fisher BioServices Inc.  
Dr. Bruce Brown  
Product SIVmac239 Vpx\_011  
Sequence H-PRELIFQVWQRSWEY-OH  
Amount 1,0 mg (net)  
Batch no. 030613Y-33  
Molecular weight (net) 2037,31 g/mol

Tests	Results
Appearance	lyophilized material
MS	2037.8 [M+H] <sup>+</sup> ESI 1019 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	E:4 F:1 I:1 L:1 P:1 R:2 S*:1 V:1 W*:2 Y:1
AAA found	E:3.9 F:1.0 I:1.0 L:1.0 P:1.0 R:2.0 S*:0.7 V:1.0 W*:1.9 Y:1.0 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	82%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

  
KOLLIS

(Analytical Data see next pages)

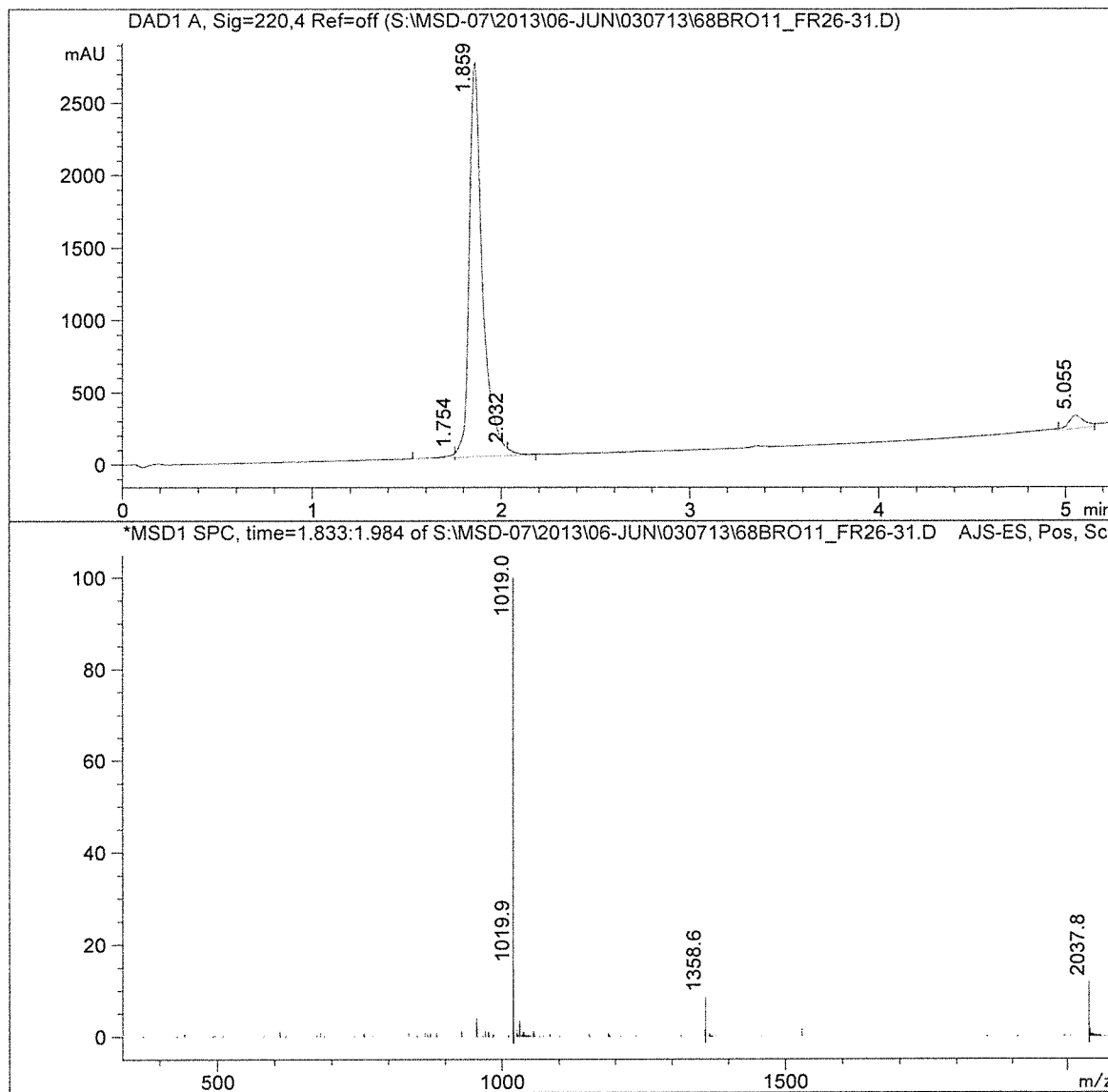




Injection Date : Wed, 3. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx011  
 Lot# 21168  
 JPT Lot# 030613Y-33

Sample Info : no sample info provided

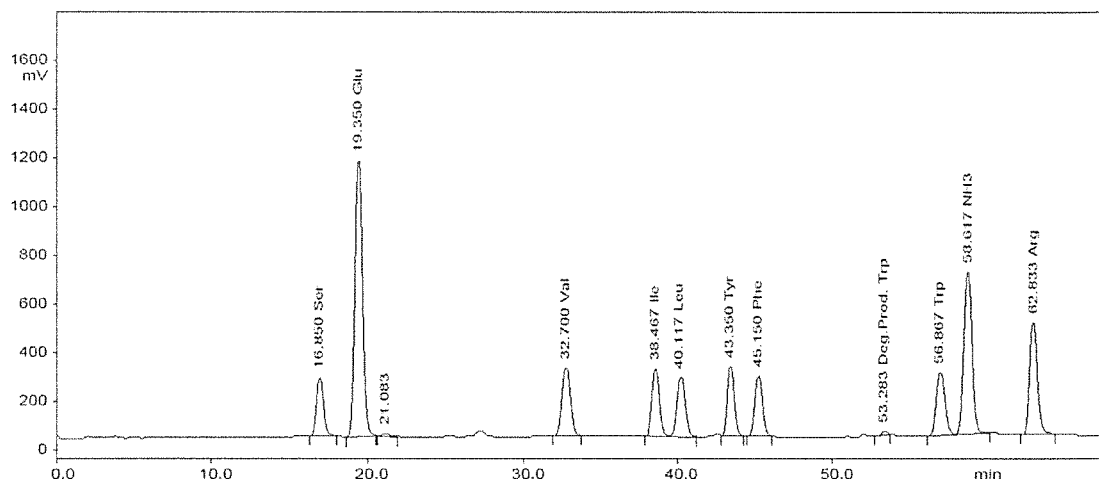


Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.754	0.0	82.0	0.6
2	1.859	0.1	13088.1	94.6
3	2.032	0.0	122.5	0.9
4	5.055	0.1	535.5	3.9

\*\*\* End of Report \*\*\*

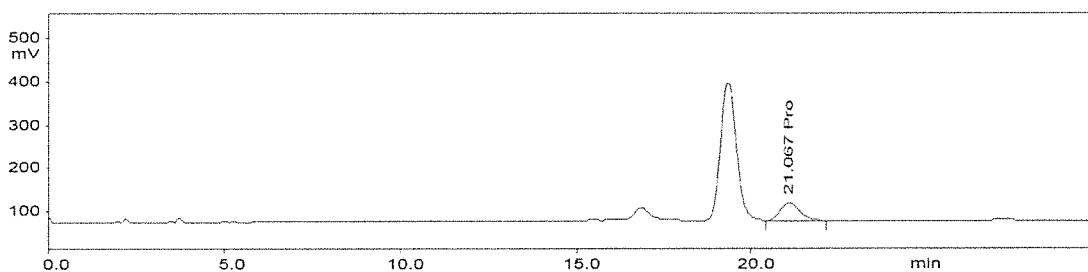
Sample Identifier: 21168\_11  
 Chromatogram: I:\JPT\Proben\2013\1307\130709\ASA1\Chromatogramme2\A1-5700057  
 Injected on: 11.07.2013 Injected at: 12:39



Calculation Method : External Standard  
 Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Ser	16.850	3407960	115.452
2	Glu	19.350	17067566	662.577
3		21.083	150368	0.000
4	Val	32.700	4792109	165.665
5	Ile	38.467	4349271	161.532
6	Leu	40.117	4234091	170.231
7	Tyr	43.350	3924805	167.921
8	Phe	45.150	3882866	167.843
9	Deg. Prod. Trp	53.283	258941	11.924
10	Trp	56.867	4600301	301.901
11	NH3	58.617	11158008	405.437
12	Arg	62.833	7223385	332.803

Sample Identifier: 21168\_11  
 Chromatogram: I:\JPT\Proben\2013\1307\130709\ASA1\Chromatogramme2\A1-4400057



Calculation Method : External Standard  
 Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	21.067	829310	164.029

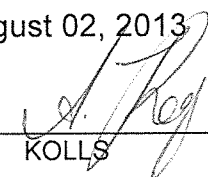
## Analytical Data Sheet

**JE.#** 21168\_12  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_012  
 H-IFQVWQRSWEYWHDE-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 030613Y-34  
**Molecular weight (net)** 2109,28 g/mol

Tests	Results
Appearance	lyophilized material
MS	2111.4 [M+H] <sup>+</sup> ESI 1055.8 [M+2H] <sup>2+</sup> ESI 704.2 [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	D:1 E:4 F:1 H:1 I:1 R:1 S*:1 V:1 W*:3 Y:1
AAA found	D:1.0 E:3.9 F:0.9 H:1.1 I:0.9 R:1.0 S*:0.8 V:1.0 W*:2.4 Y:1.0 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	79%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

  
 KOLLS

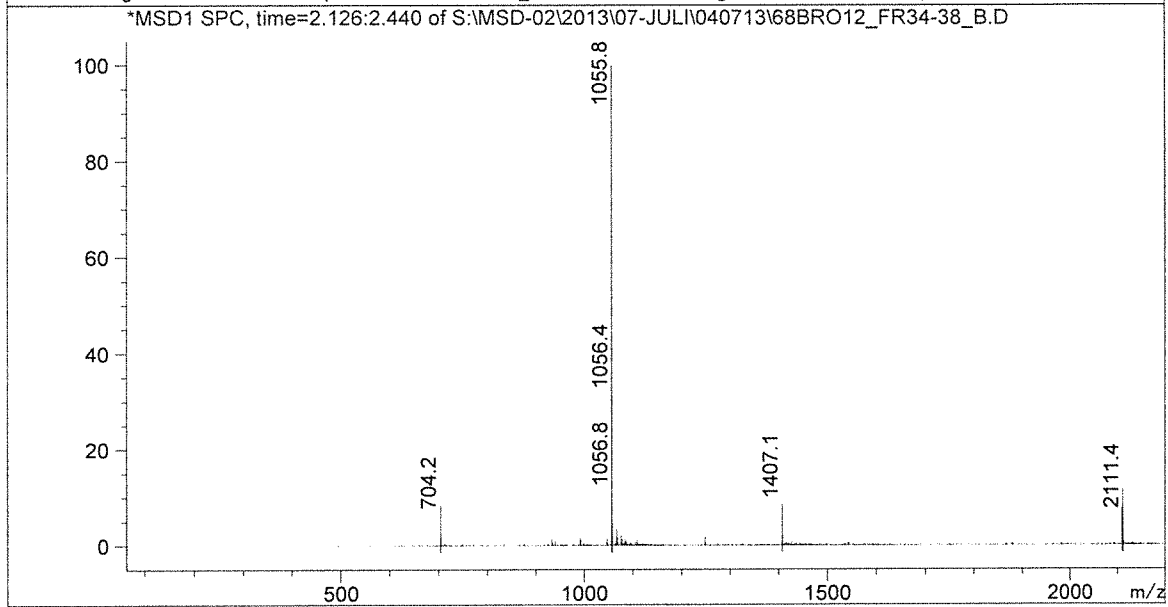
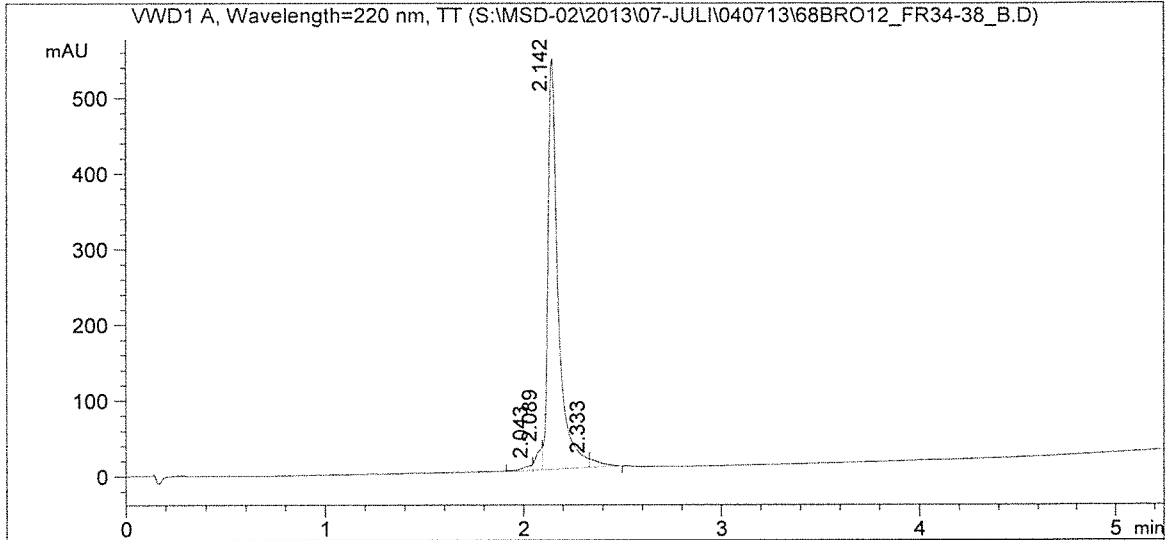
(Analytical Data see next pages)



Injection Date : Fri, 5. Jul. 2013  
 Sample Name : Default  
 Acq Operator : MSD  
 Acq. Method : D:\METHODS\  
 column used : Je\_439  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx012  
 Lot# 21168  
 JPT Lot# 030613Y-34

Sample Info : no sample info provided



Signal 2: VWD1 A, Wavelength=220 nm, TT

Peak #	RT [min]	Width [min]	Area	Area %
1	2.043	0.0	23.9	1.2
2	2.089	0.0	60.4	2.9
3	2.142	0.1	1937.4	94.0
4	2.333	0.1	40.0	1.9

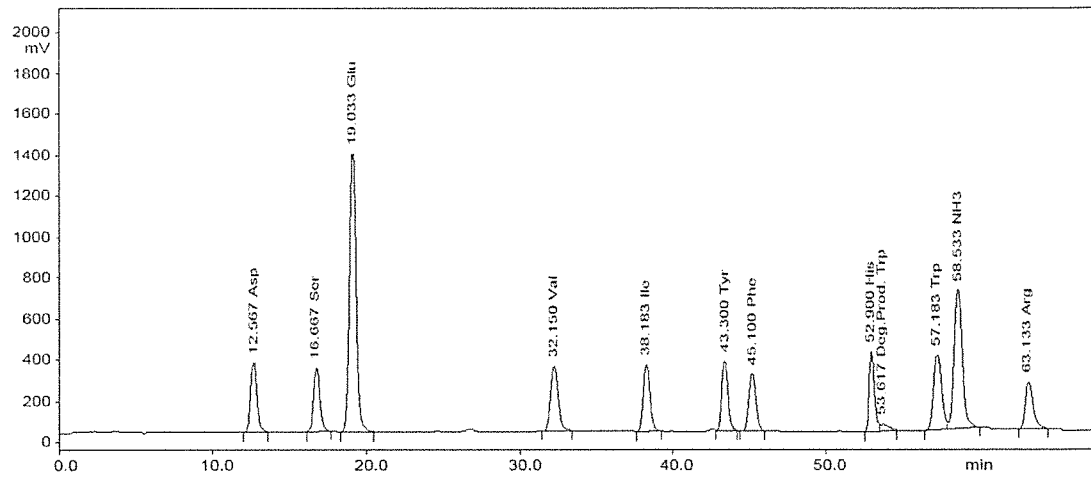
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_12

Chromatogram: I:\JPT\Proben\2013\1307\130713\ASA1\Chromatogramme\A1-5700098

Injected on: 15.07.2013

Injected at: 12:09



Calculation Method : External Standard

Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.567	4211805	161.066
2	Ser	16.667	3856512	129.369
3	Glu	19.033	17961752	665.295
4	Val	32.150	4972192	165.680
5	Ile	38.183	4348339	156.389
6	Tyr	43.300	4111828	168.576
7	Phe	45.100	3921679	159.203
8	His	52.900	3820781	186.718
9	Deg.Prod. Trp	53.617	587361	25.850
10	Trp	57.183	6144036	378.566
11	NH3	58.533	11370719	389.192
12	Arg	63.133	3630421	166.661

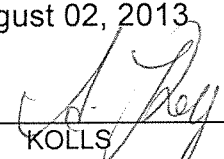
## Analytical Data Sheet

**JE.#** 21168\_13  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_013  
 H-WQRSWEYWHDEQGMS-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 030613Y-35  
**Molecular weight (net)** 2025,13 g/mol

Tests	Results
Appearance	lyophilized material
MS	2026.6 [M+H] <sup>+</sup> ESI 1013 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	D:1 E:4 G:1 H:1 M:1 R:1 S*:2 W*:3 Y:1
AAA found	D:1.0 E:3.9 G:1.0 H:1.0 M:1.0 R:1.0 S*:1.3 W*:2.8 Y:1.0 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	81%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

  
 KOLLS

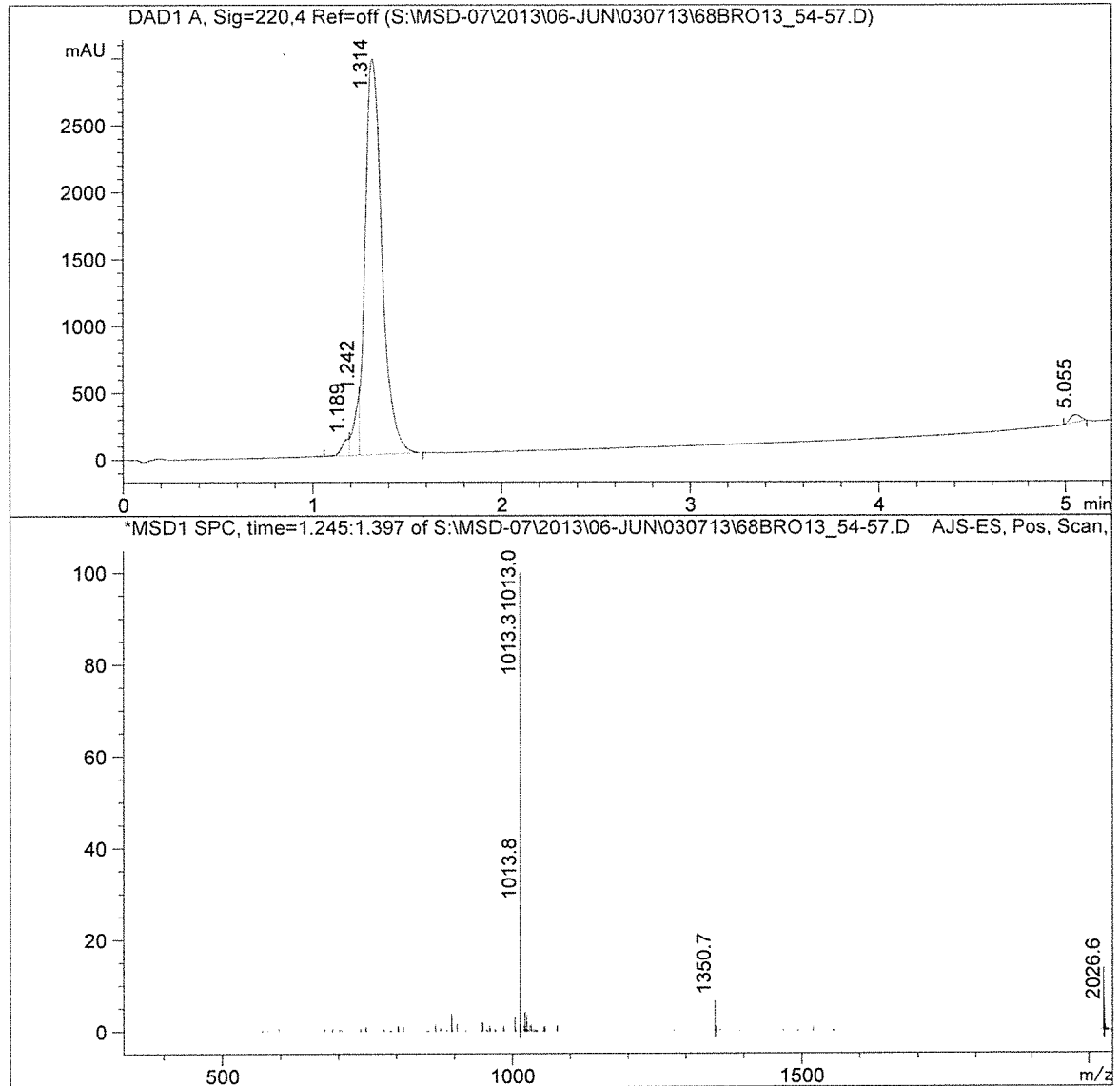
(Analytical Data see next pages)



Injection Date : Wed, 3. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx013  
 Lot# 21168  
 JPT Lot# 030613Y-35

Sample Info : no sample info provided



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.189	0.0	362.8	1.9
2	1.242	0.0	899.2	4.6
3	1.314	0.1	18049.4	92.4
4	5.055	0.1	215.3	1.1

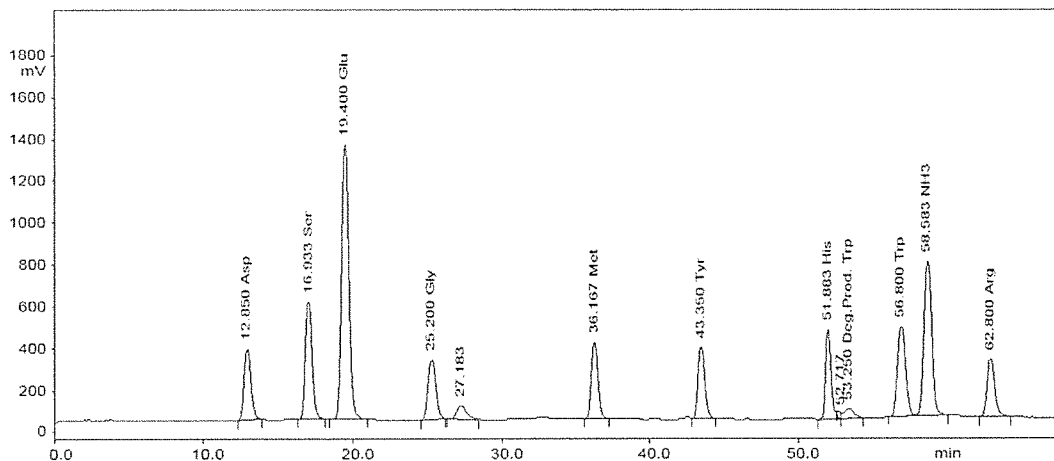
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_13

Chromatogram: I:\JPT\Proben\2013\1307\130709\ASA1\Chromatogramme2\A1-5700058

Injected on: 11.07.2013

Injected at: 14:22



Calculation Method : External Standard

Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.850	4854871	195.394
2	Ser	16.933	7832914	265.357
3	Glu	19.400	19850230	770.602
4	Gly	25.200	4803252	191.544
5		27.183	1426370	0.000
6	Met	36.167	4924829	193.993
7	Tyr	43.350	4845237	207.301
8	His	51.883	4586447	203.023
9		52.717	211357	0.000
10	Deg.Prod. Trp	53.250	1013036	46.650
11	Trp	56.800	7608694	499.331
12	NH3	58.583	12401036	450.604
13	Arg	62.800	4365968	201.153



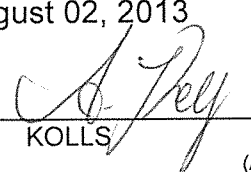
## Analytical Data Sheet

**JE.#** 21168\_14  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_014  
 H-WEYWHDEQGMSPSYV-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 030613Y-36  
**Molecular weight (net)** 1914,03 g/mol

Tests	Results
Appearance	lyophilized material
MS	1914.6 [M+H] <sup>+</sup> ESI 957.4 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	D:1 E:3 G:1 H:1 M:1 P:1 S*:2 V:1 W*:2 Y:2
AAA found	D:1.0 E:3.0 G:1.0 H:1.0 M:1.0 P:1.0 S*:1.4 V:1.0 W*:1.5 Y:2.1 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	86%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

  
 KOLLS

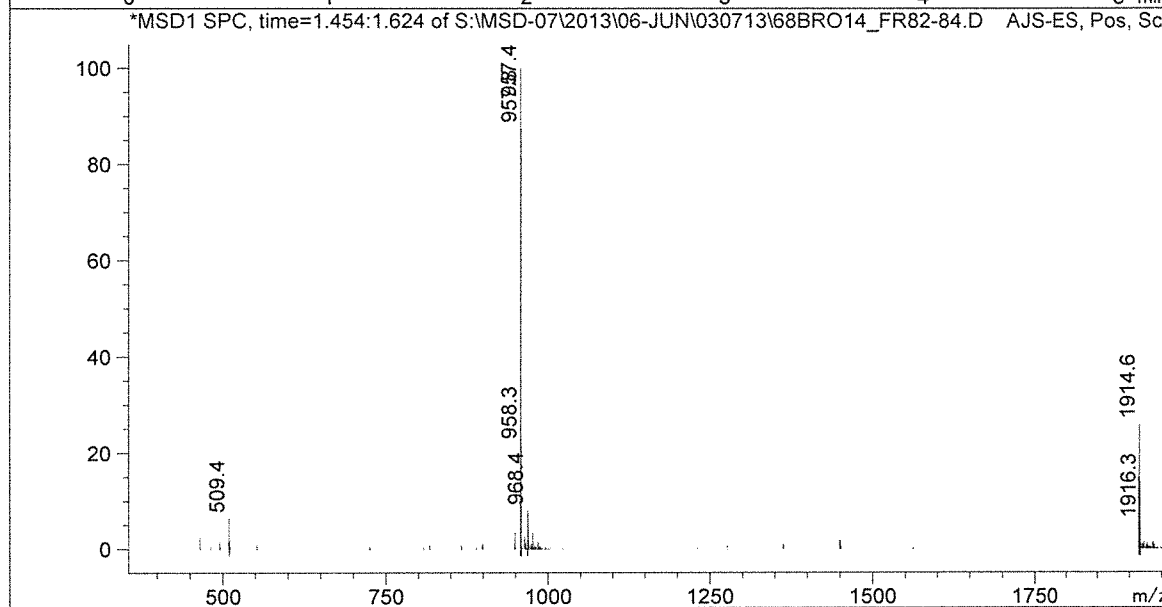
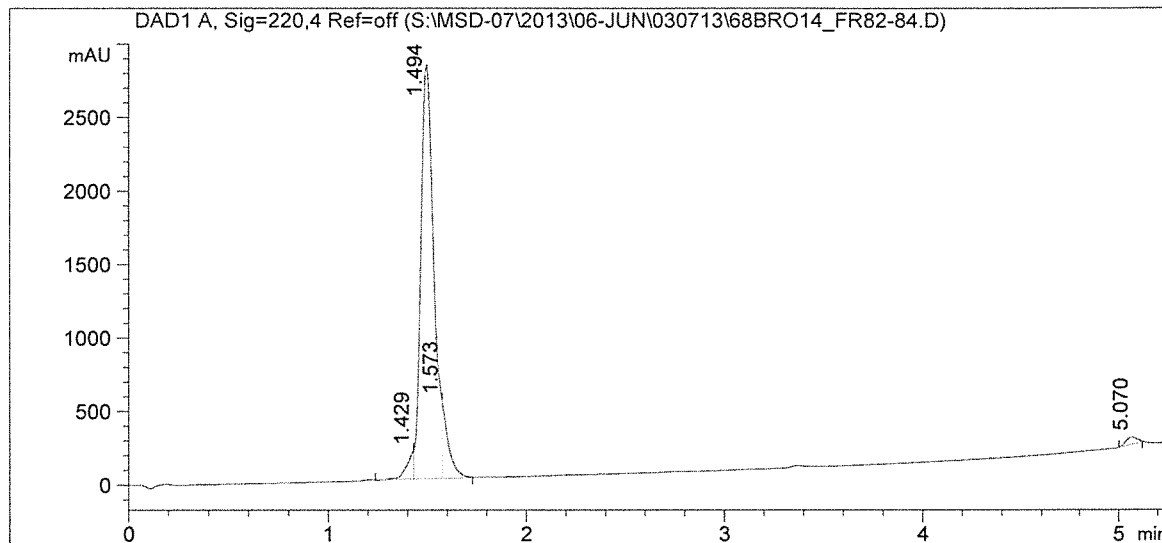
(Analytical Data see next pages)



Injection Date : Wed, 3. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx014  
 Lot# 21168  
 JPT Lot# 030613Y-36

Sample Info : no sample info provided

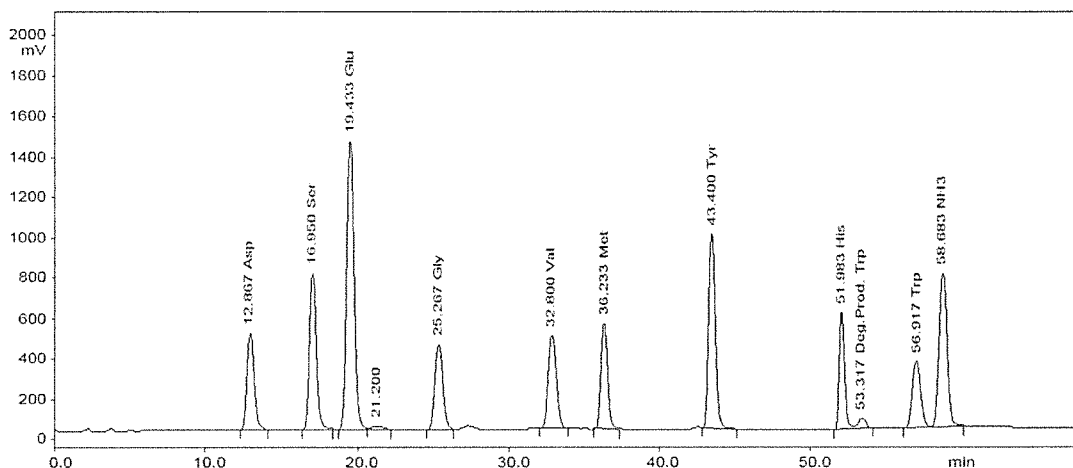


Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.429	0.0	483.5	3.4
2	1.494	0.1	12619.4	87.8
3	1.573	0.0	1068.3	7.4
4	5.070	0.1	200.5	1.4

\*\*\* End of Report \*\*\*

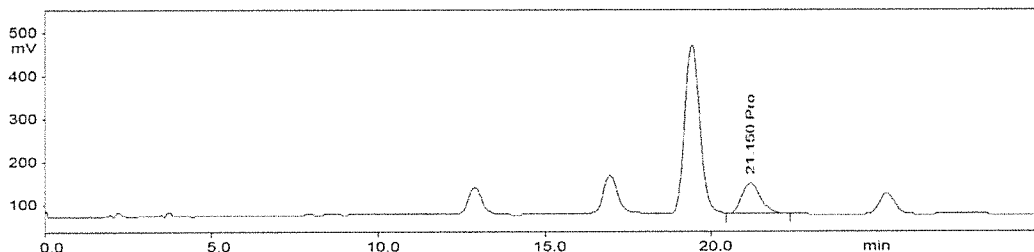
Sample Identifier: 21168\_14  
 Chromatogram: I:\JPT\Proben\2013\1307\130709\ASA1\Chromatogramme3\A1-5700082  
 Injected on: 13.07.2013 Injected at: 07:42



Calculation Method : External Standard  
 Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.867	6901292	267.957
2	Ser	16.950	10916325	374.829
3	Glu	19.433	21766008	808.215
4		21.200	360019	0.000
5	Gly	25.267	6994456	269.495
6	Val	32.800	7941654	266.989
7	Met	36.233	7031764	265.987
8	Tyr	43.400	13189926	554.217
9	His	51.983	6040475	270.851
10	Deg. Prod. Trp	53.317	895646	39.724
11	Trp	56.917	5896437	352.307
12	NH3	58.683	12738720	457.648

Sample Identifier: 21168\_14  
 Chromatogram: I:\JPT\Proben\2013\1307\130709\ASA1\Chromatogramme3\A1-4400082



Calculation Method : External Standard  
 Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	21.150	1411629	278.027



## Analytical Data Sheet

JE.# 21168\_15  
PO.#  
Customer Fisher BioServices Inc.  
Dr. Bruce Brown  
Product SIVmac239 Vpx\_015  
Sequence H-HDEQGMSPSYVKYRY-OH  
Amount 1,0 mg (net)  
Batch no. 030613Y-37  
Molecular weight (net) 1860,04 g/mol

Tests	Results
Appearance	lyophilized material
MS	1861.3 [M+H] <sup>+</sup> ESI 930.9 [M+2H] <sup>2+</sup> ESI 620.7 [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	D:1 E:2 G:1 H:1 K:1 M:1 P:1 R:1 S*:2 V:1 Y:3
AAA found	D:1.0 E:2.0 G:1.0 H:1.1 K:1.0 M:1.0 P:1.0 R:1.0 S*:1.2 V:1.0 Y:3.0 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	75%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

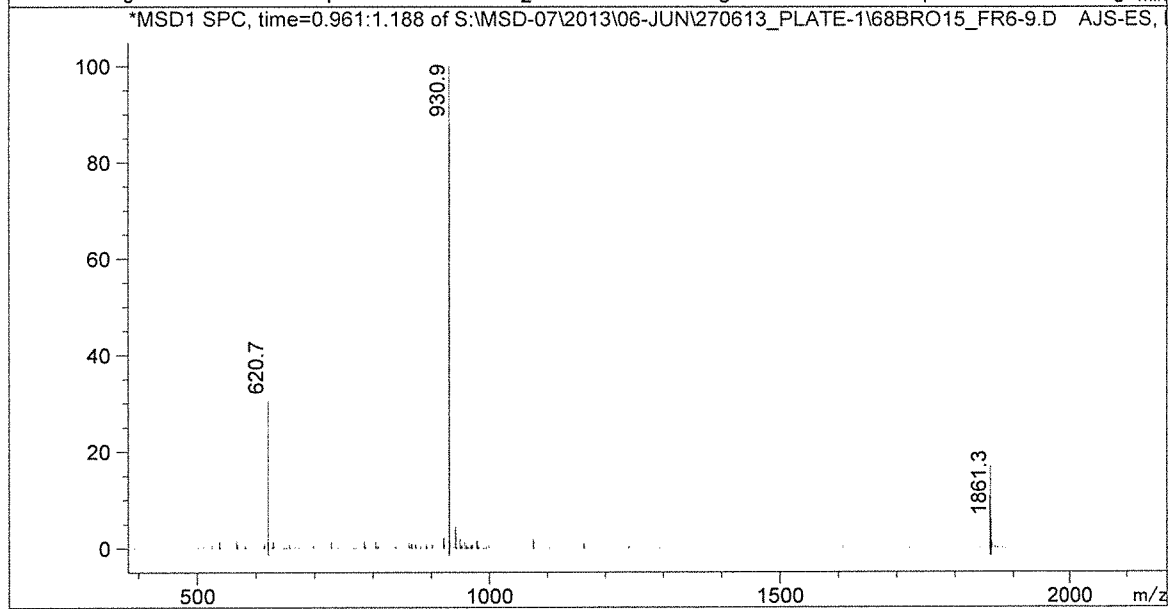
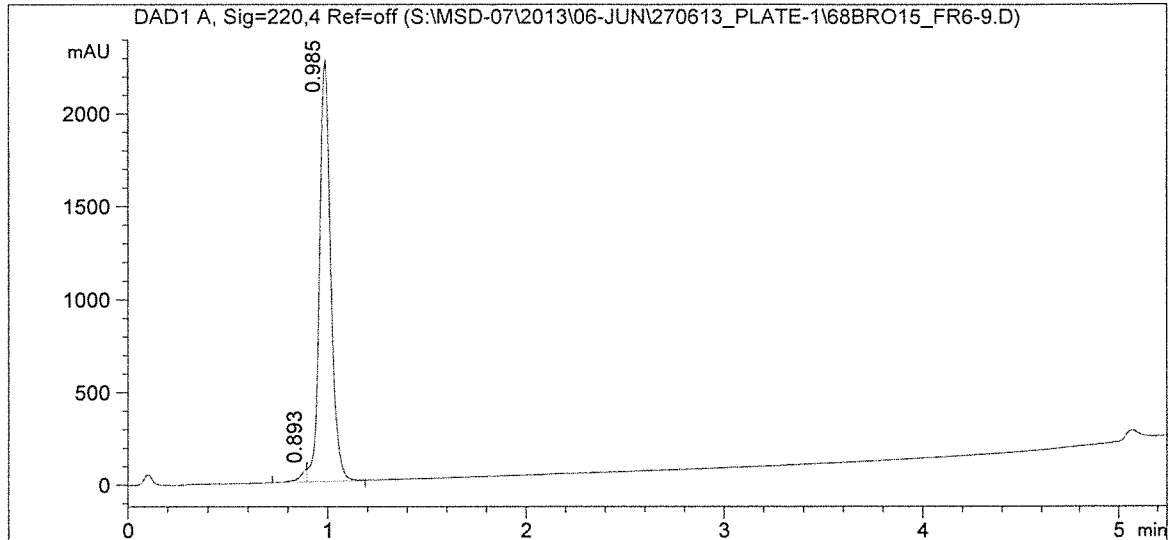
  
KOLLS

(Analytical Data see next pages)

Injection Date : Thu, 27. Jun. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M-Plate.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx015  
 Lot# 21168  
 JPT Lot# 030613Y-37

Sample Info : no sample info provided

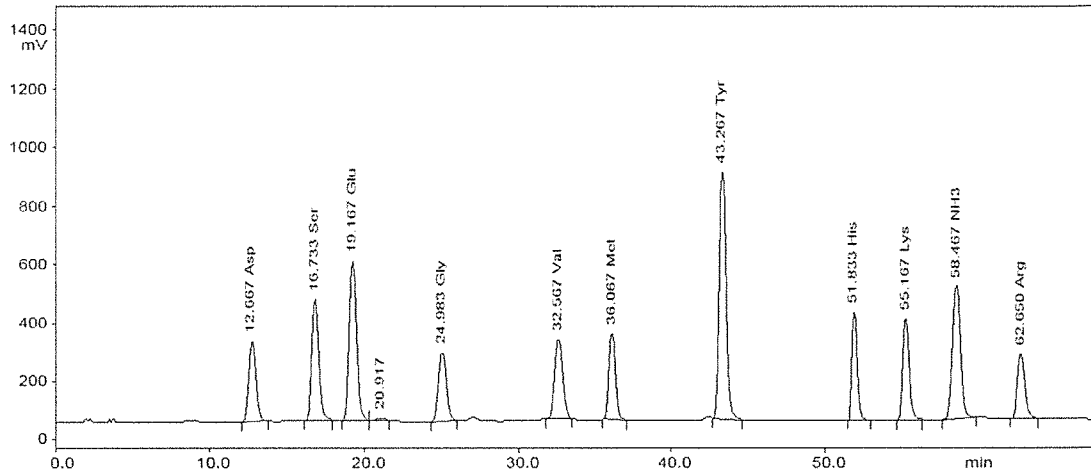


Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	0.893	0.0	175.1	1.9
2	0.985	0.1	8867.2	98.1

\*\*\* End of Report \*\*\*

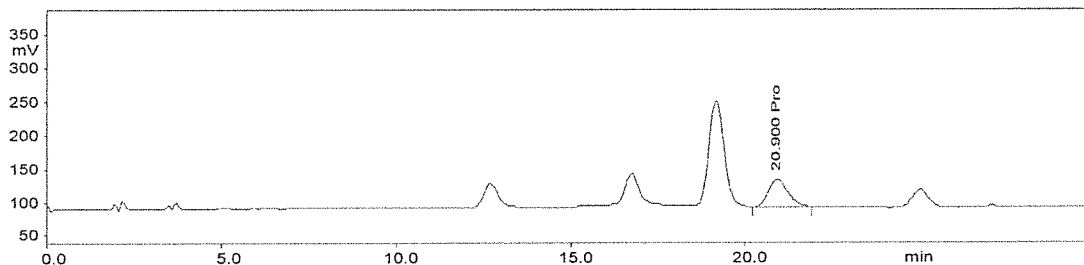
Sample Identifier: 21168\_15  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700040  
 Injected on: 06.07.2013 Injected at: 23:21



Calculation Method : External Standard  
 Calibration Method : One Point  
 Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Asp	12.667	3927013	305.925
2	Ser	16.733	5719379	385.039
3	Glu	19.167	8238743	626.920
4		20.917	154667	0.000
5	Gly	24.983	3867239	305.338
6	Val	32.567	4594850	315.621
7	Met	36.067	3908113	295.132
8	Tyr	43.267	11484080	916.131
9	His	51.833	3760429	326.270
10	Lys	55.167	4388804	319.677
11	NH3	58.467	7601433	563.583
12	Arg	62.650	3417296	307.251

Sample Identifier: 21168\_15  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-4400040



Calculation Method : External Standard  
 Calibration Method : One Point  
 Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	20.900	808772	315.867

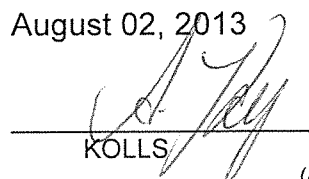
## Analytical Data Sheet

JE.# 21168\_16  
PO.#  
Customer Fisher BioServices Inc.  
Dr. Bruce Brown  
Product SIVmac239 Vpx\_016  
Sequence H-GMSPSYVKYRYLCLI-OH  
Amount 1,0 mg (net)  
Batch no. 030613Y-38  
Molecular weight (net) 1793,19 g/mol

Tests	Results
Appearance	lyophilized material
MS	1792.8 [M+H] <sup>+</sup> ESI 897 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	C*:1 G:1 I:1 K:1 L:2 M:1 P:1 R:1 S*:2 V:1 Y:3
AAA found	C*:0.8 G:0.9 I:1.0 K:1.0 L:2.1 M:0.9 P:1.0 R:1.0 S*:1.2 V:1.0 Y:3.0 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	80%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

  
KOLLS

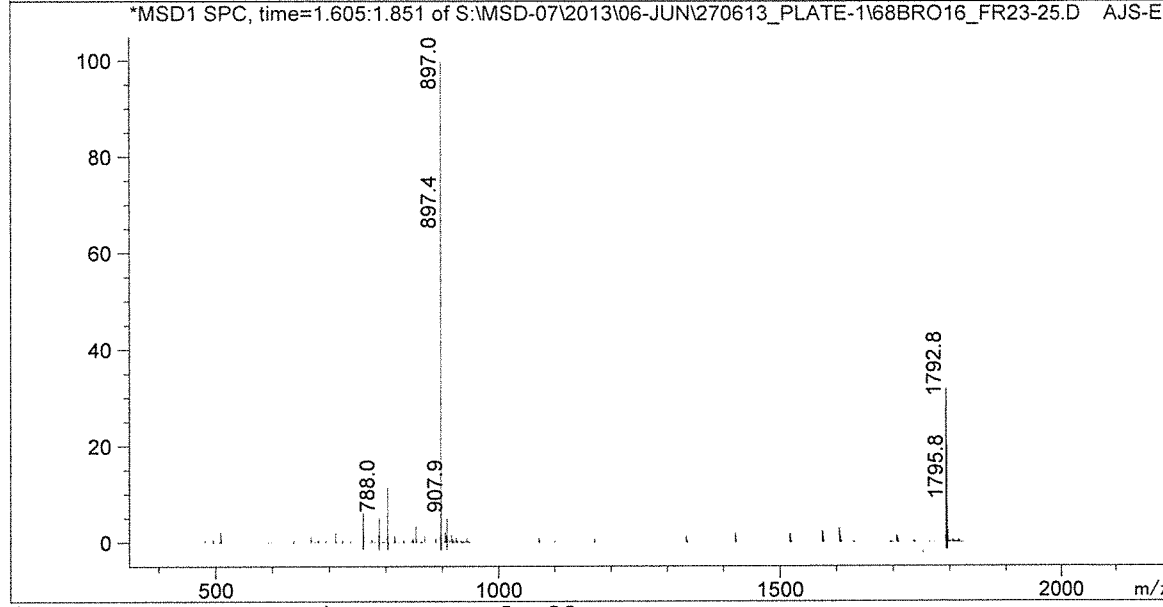
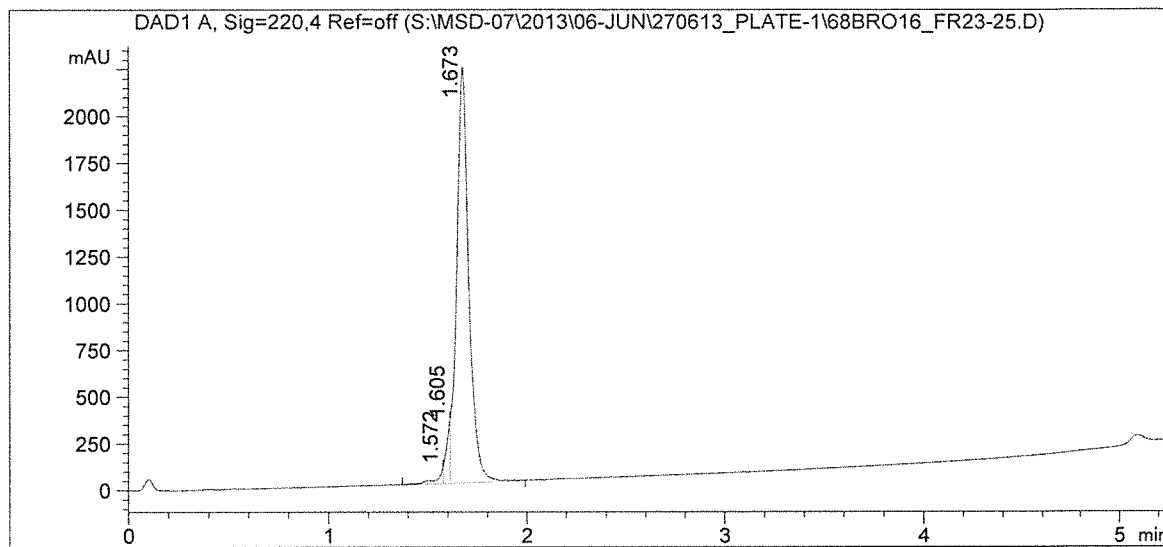
(Analytical Data see next pages)



Injection Date : Thu, 27. Jun. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M-Plate.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx016  
 Lot# 21168  
 JPT Lot# 030613Y-38

Sample Info : no sample info provided



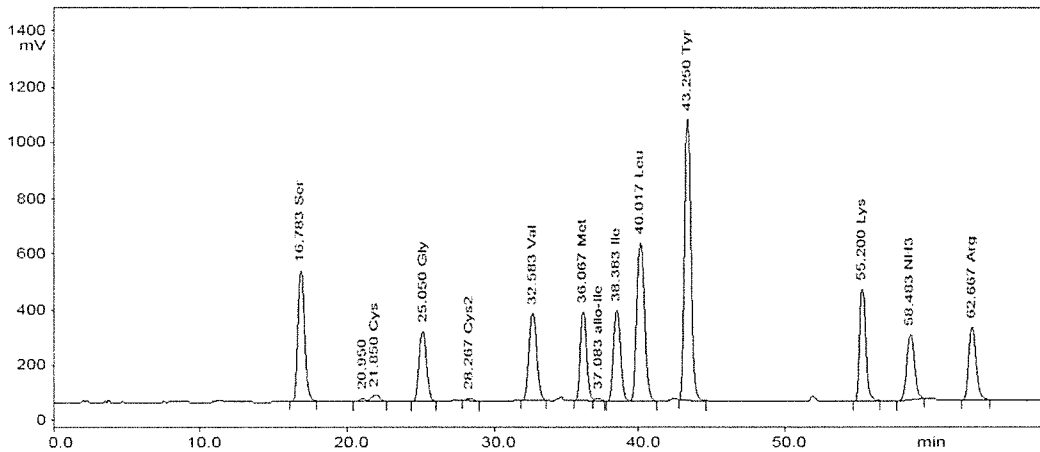
Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.572	0.0	204.5	2.0
2	1.605	0.0	466.3	4.6
3	1.673	0.1	9447.8	93.4

\*\*\* End of Report \*\*\*



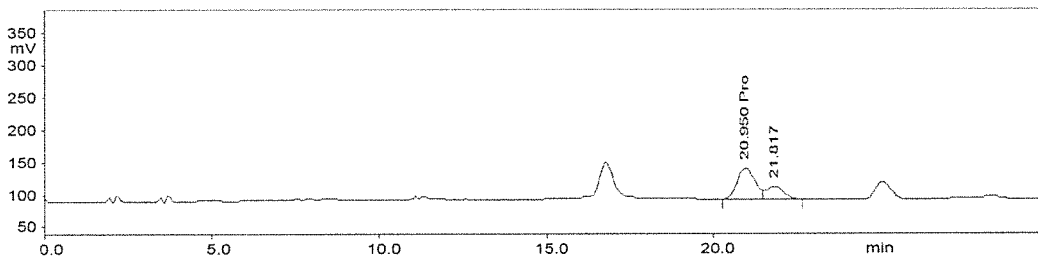
Sample Identifier: 21168\_16  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700041  
 Injected on: 07.07.2013 Injected at: 01:04



Calculation Method : External Standard  
 Calibration Method : One Point  
 Factor: 2.000000e+000

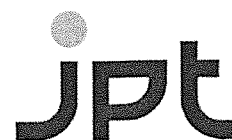
Peak No.	Name	Retention Time	Area	Absolute nmol
1	Ser	16.783	6597960	444.186
2		20.950	200812	0.000
3	Cys	21.850	489213	271.908
4	Gly	25.050	4157582	328.262
5	Cys2	28.267	193518	27.355
6	Val	32.583	5305232	364.418
7	Met	36.067	4276377	322.943
8	allo-Ile	37.083	129788	10.185
9	Ile	38.383	5074566	363.280
10	Leu	40.017	9850402	758.012
11	Tyr	43.250	13554008	1081.257
12	Lys	55.200	5173546	376.837
13	NH3	58.483	3922527	290.823
14	Arg	62.667	4081804	366.998

Sample Identifier: 21168\_16  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-4400041



Calculation Method : External Standard  
 Calibration Method : One Point  
 Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	20.950	920816	359.626
2		21.817	355881	0.000



## Analytical Data Sheet

JE.# 21168\_17  
PO.#  
Customer Fisher BioServices Inc.  
Dr. Bruce Brown  
Product SIVmac239 Vpx\_017  
Sequence H-SYVKYRYLCLIQKAL-OH  
Amount 1,0 mg (net)  
Batch no. 030613Y-39  
Molecular weight (net) 1861,29 g/mol

Tests	Results
Appearance	lyophilized material
MS	1862.6 [M+H] <sup>+</sup> ESI 931 [M+2H] <sup>2+</sup> ESI 621.1 [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 C*:1 E:1 I:1 K:2 L:3 R:1 S*:1 V:1 Y:3
AAA found	A:1.1 C*:0.7 E:1.0 I:1.0 K:2.0 L:3.1 R:1.0 S*:0.7 V:1.0 Y:2.9 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	78%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

  
KOLLS

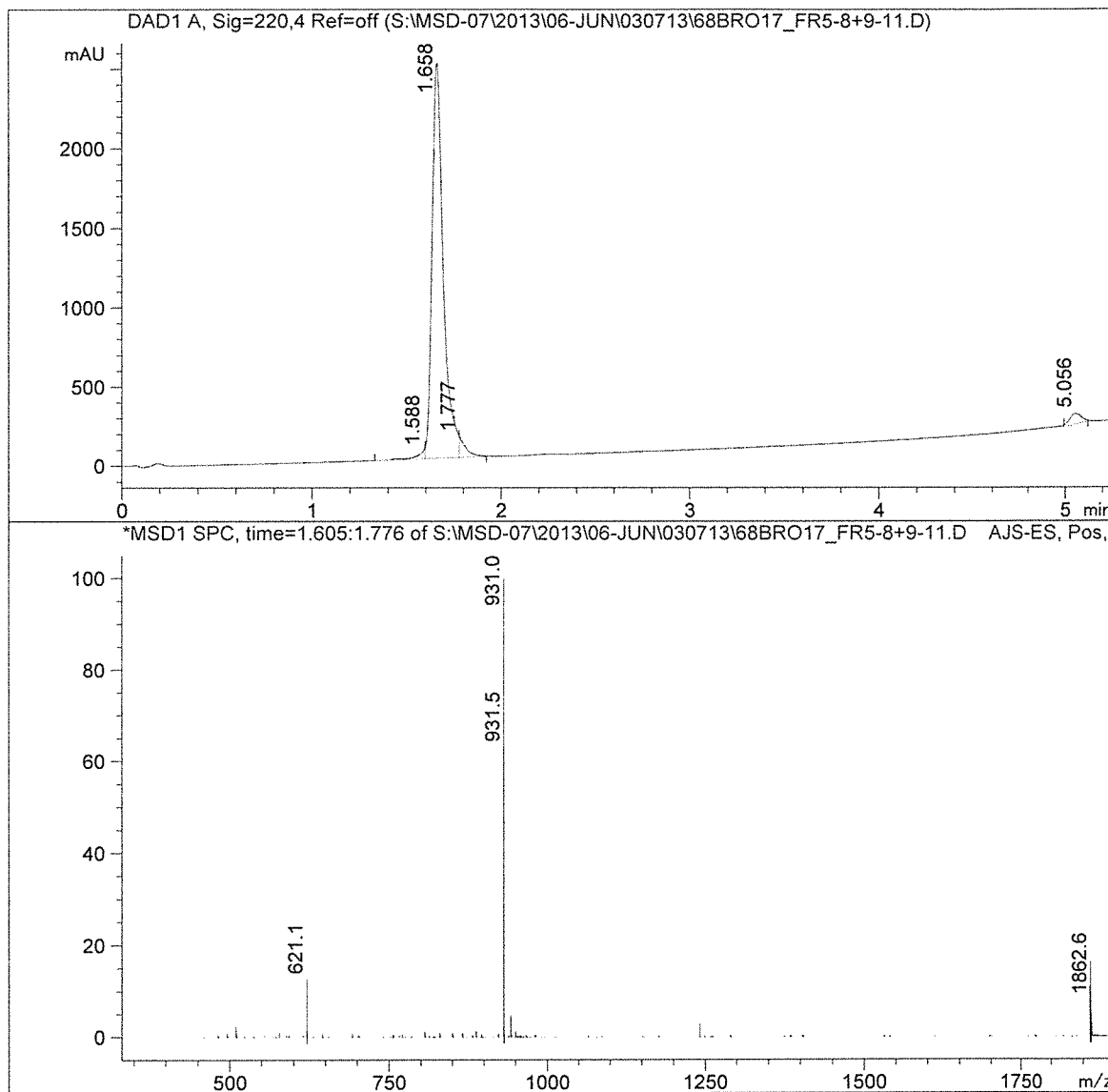
(Analytical Data see next pages)



Injection Date : Wed, 3. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_vpx017  
 Lot# 21168  
 JPT Lot# 030613Y-39

Sample Info : no sample info provided



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.588	0.1	166.5	1.5
2	1.658	0.1	10318.7	93.2
3	1.777	0.0	296.4	2.7
4	5.056	0.1	291.6	2.6

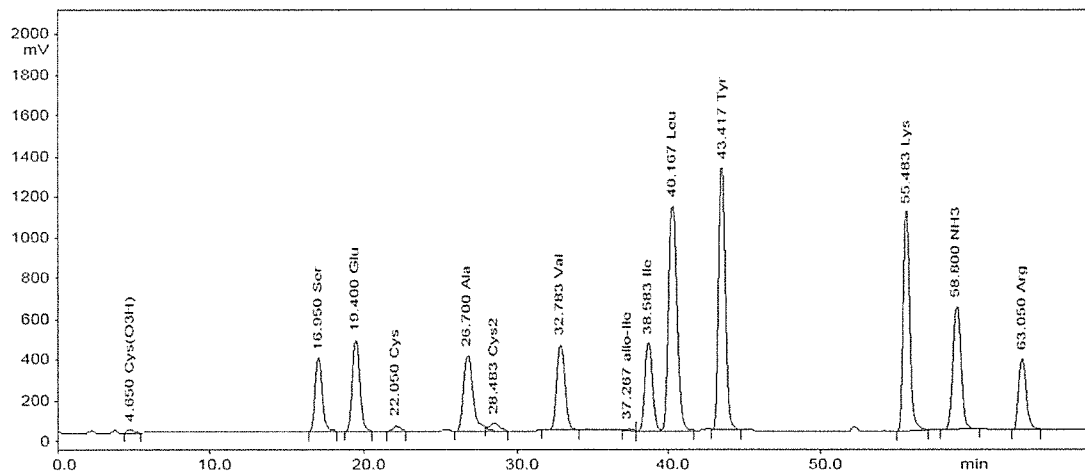
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_17

Chromatogram: I:\JPT\Proben\2013\1307\130709\ASA1\Chromatogramme3\A1-5700083

Injected on: 13.07.2013

Injected at: 09:26



Calculation Method : External Standard

Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Cys(O3H)	4.650	177585	6.667
2	Ser	16.950	5062567	173.831
3	Glu	19.400	6924056	257.104
4	Cys	22.050	450830	108.470
5	Ala	26.700	7769388	276.938
6	Cys2	28.483	734369	51.168
7	Val	32.783	7265091	244.244
8	allo-Ile	37.267	117368	4.608
9	Ile	38.583	6809663	244.327
10	Leu	40.167	19700704	766.247
11	Tyr	43.417	17431550	732.443
12	Lys	55.483	13832847	490.061
13	NH3	58.800	10248159	368.173
14	Arg	63.050	5441908	249.788

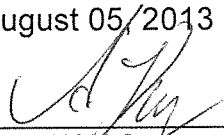
## Analytical Data Sheet

**JE.#** 21168\_18\_W3  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_018  
 H-YRYLCLIQKALFMHC-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 110713A2  
**Molecular weight (net)** 1902,38 g/mol

Tests	Results
Appearance	lyophilized material
MS	1901.8 [M+H] <sup>+</sup> ESI 951.9 [M+2H] <sup>2+</sup> ESI 634.8 [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 C*:2 E:1 F:1 H:1 I:1 K:1 L:3 M:1 R:1 Y*:2
AAA found	A:1.0 C*:2.0 E:1.0 F:1.0 H:1.0 I:0.9 K:1.0 L:2.9 M:0.9 R:0.9 Y*:1.8 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	80%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 05, 2013

Quality control:

  
 KOLLES

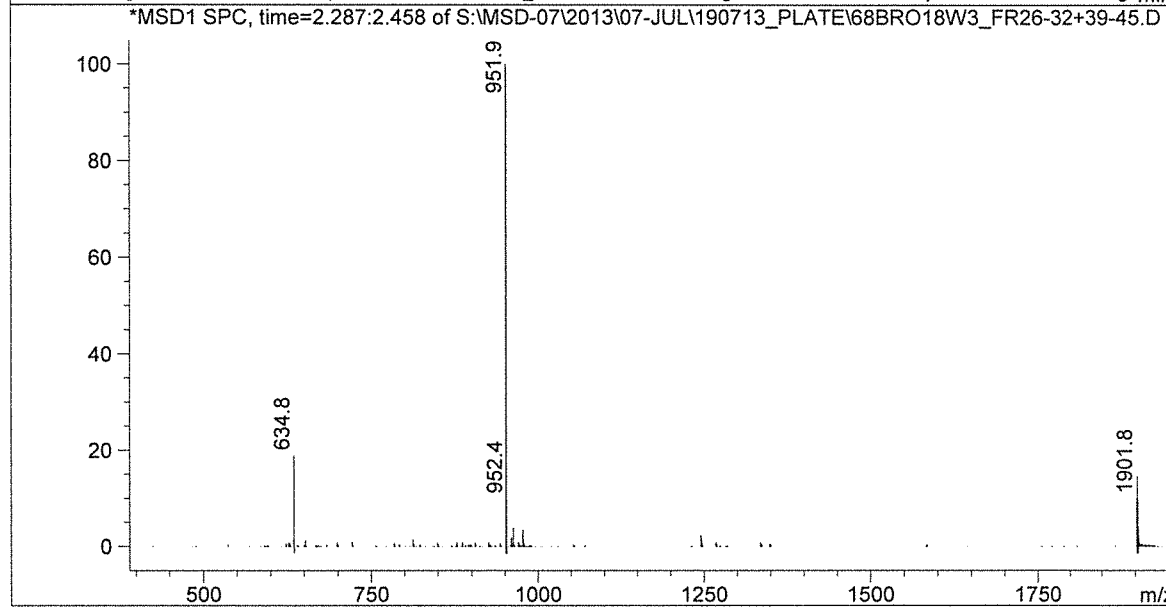
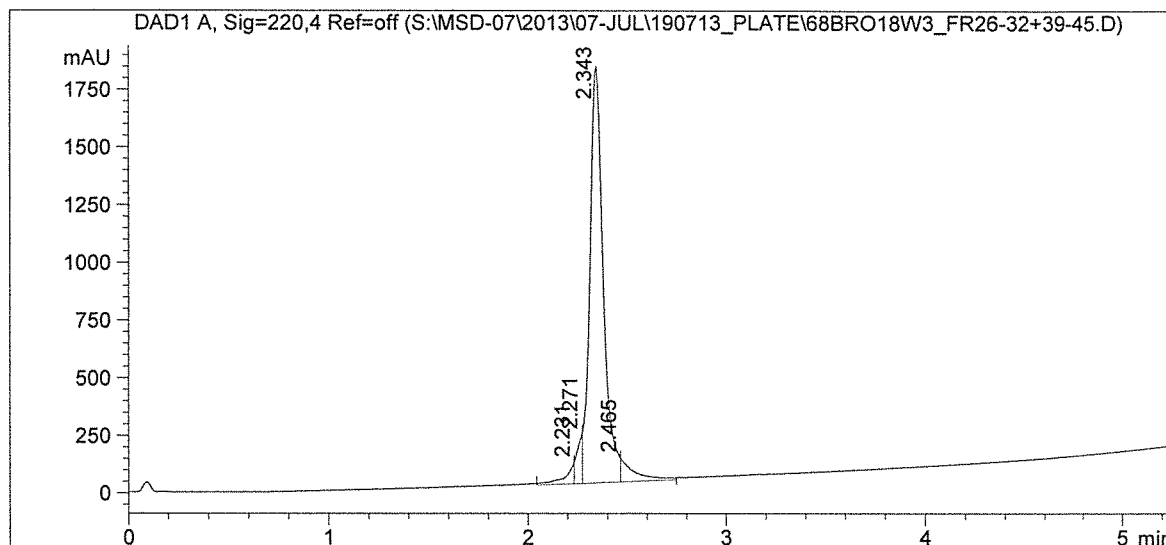
(Analytical Data see next pages)



Injection Date : Fri, 19. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx018  
 Lot# 21168  
 JPT Lot# 110713A2

Sample Info : no sample info provided



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	2.231	0.1	299.4	3.1
2	2.271	0.0	427.8	4.4
3	2.343	0.1	8429.8	87.4
4	2.465	0.1	492.5	5.1

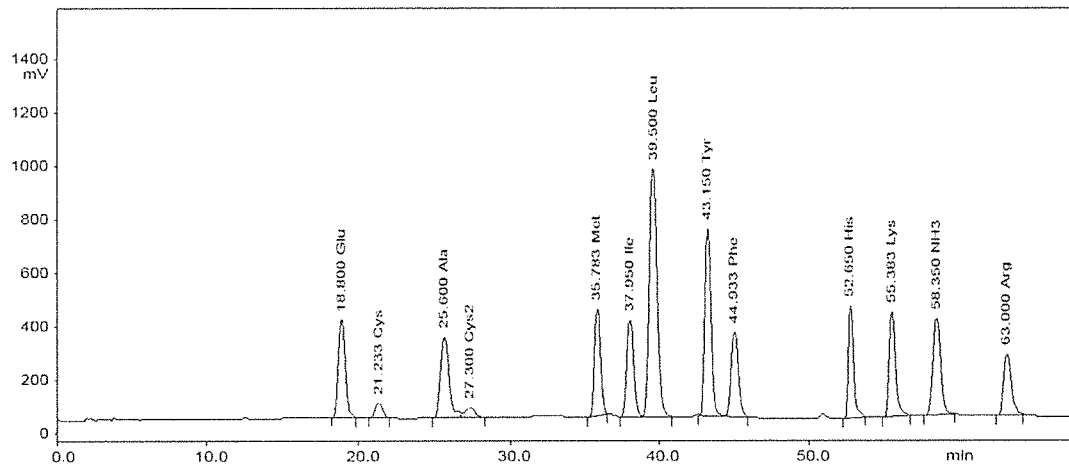
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_18

Chromatogram: I:\JPT\Proben\2013\1308\130801\Chromatogramme\A1-5700003

Injected on: 03.08.2013

Injected at: 14:39



Calculation Method : External Standard

Calibration Method : One Point

Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Glu	18.800	5352551	413.874
2	Cys	21.233	923870	705.345
3	Ala	25.600	5795009	419.374
4	Cys2	27.300	881464	121.258
5	Met	35.783	4960153	380.407
6	Ile	37.950	5326679	380.733
7	Leu	39.500	15341280	1187.997
8	Tyr	43.150	8862326	749.129
9	Phe	44.933	4741404	395.089
10	His	52.650	4174989	426.248
11	Lys	55.383	5101504	395.687
12	NH3	58.350	6042483	416.900
13	Arg	63.000	3739005	375.174

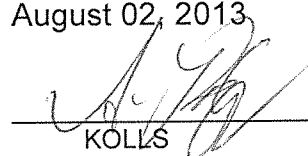
## Analytical Data Sheet

**JE.#** 21168\_19\_W2  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_019  
 H-CLIQKALFMHCKKGC-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 110713A8a  
**Molecular weight (net)** 1723,20 g/mol

Tests	Results
Appearance	lyophilized material
MS	1723.7 [M+H] <sup>+</sup> ESI 862 [M+2H] <sup>2+</sup> ESI 575 [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 C*:3 E:1 F:1 G:1 H:1 I:1 K:3 L:2 M:1
AAA found	A:0.9 C*:3.1 E:1.0 F:1.0 G:0.9 H:1.1 I:0.9 K:2.9 L:1.9 M:0.9 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	68%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

  
 KOLLS

(Analytical Data see next pages)

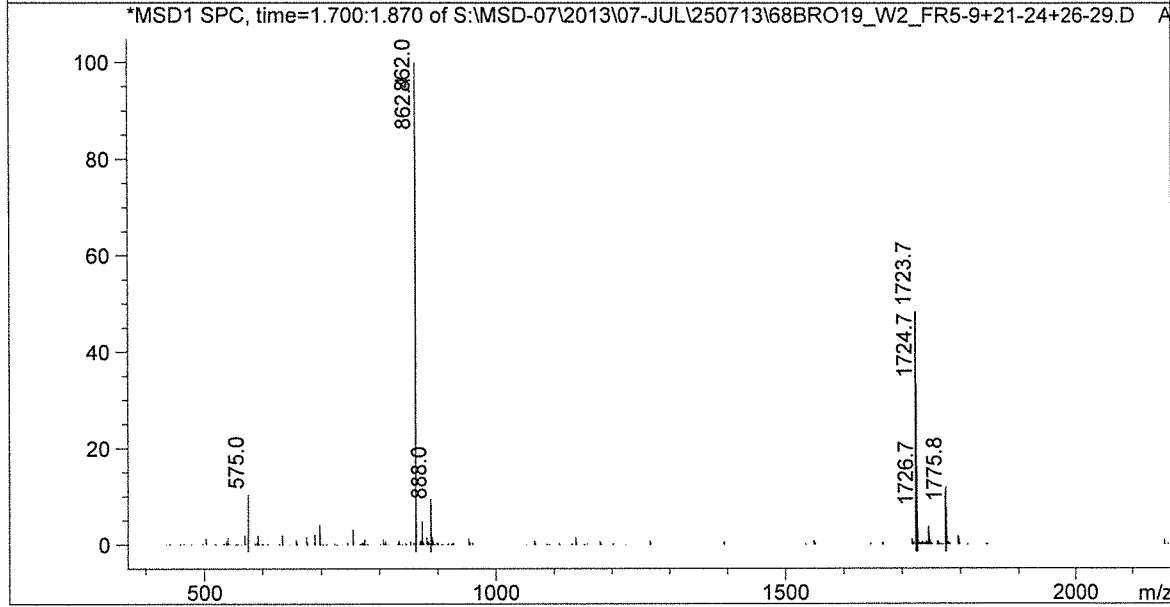
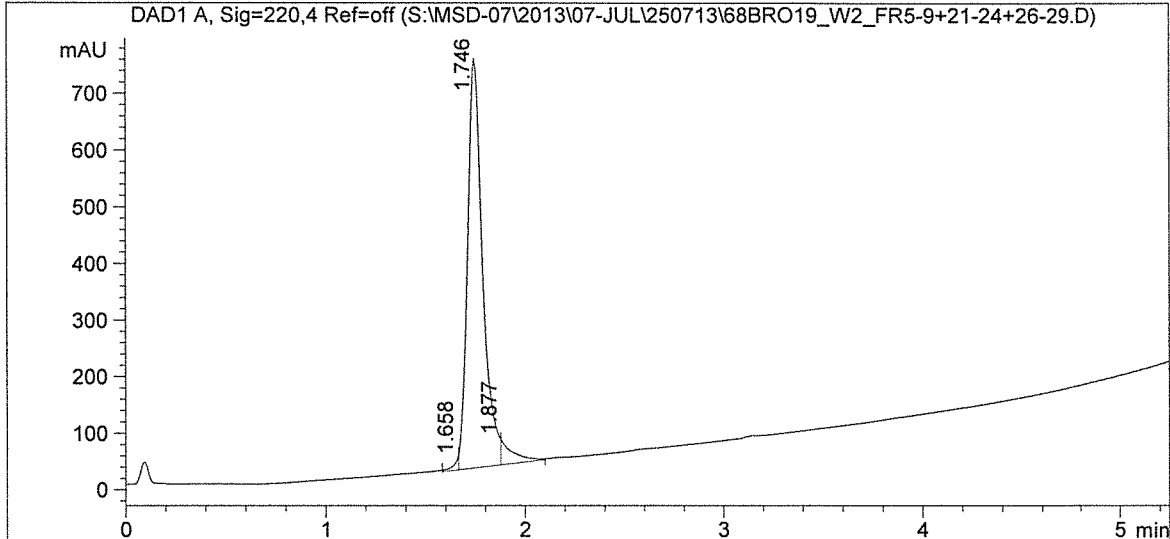




Injection Date : Thu, 25. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx019  
 Lot# 21168  
 JPT Lot# 110713A8a

Sample Info : no sample info provided



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.658	0.0	44.8	1.1
2	1.746	0.1	3810.3	94.5
3	1.877	0.1	176.1	4.4

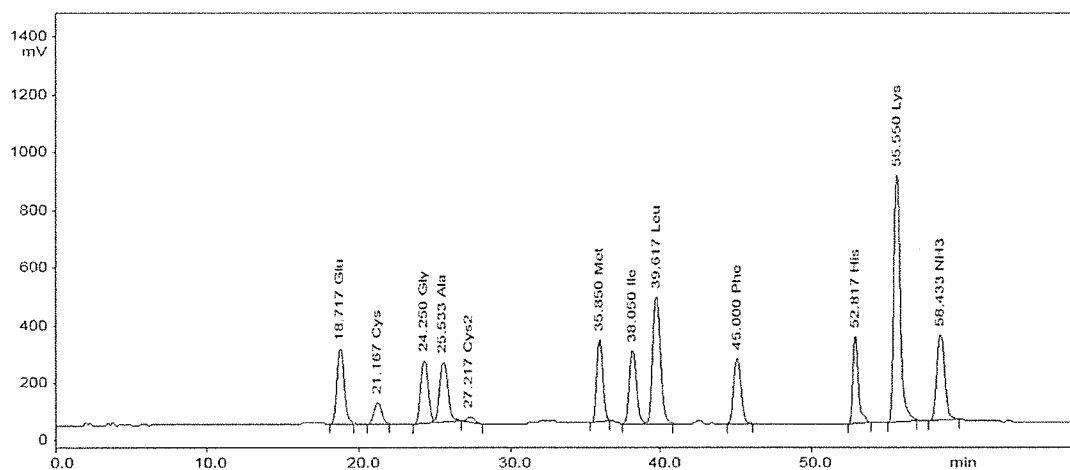
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_19

Chromatogram: I:\JPT\Proben\2013\1307\130730\ASA1\Chromatogramme\A1-5700190

Injected on: 31.07.2013

Injected at: 20:48



Calculation Method : External Standard

Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Glu	18.717	3728744	139.672
2	Cys	21.167	1150096	418.292
3	Gly	24.250	3452151	132.549
4	Ala	25.533	3730231	131.329
5	Cys2	27.217	277822	18.576
6	Met	35.850	3518762	132.029
7	Ile	38.050	3613058	127.600
8	Leu	39.617	7104966	273.014
9	Phe	45.000	3421582	138.451
10	His	52.817	3161388	149.077
11	Lys	55.550	11088206	411.763
12	NH3	58.433	4939349	162.630



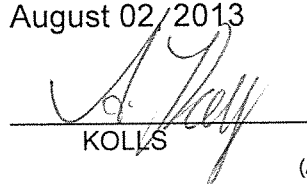
## Analytical Data Sheet

JE.# 21168\_20  
PO.#  
Customer Fisher BioServices Inc.  
Dr. Bruce Brown  
Product SIVmac239 Vpx\_020  
Sequence H-KALFMHCKKGCRCCLG-OH  
Amount 1,0 mg (net)  
Batch no. 030613Y-42  
Molecular weight (net) 1695,15 g/mol

Tests	Results
Appearance	lyophilized material
MS	1695.7 [M+H] <sup>+</sup> ESI 848.4 [M+2H] <sup>2+</sup> ESI 565.7 [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 C*:3 F:1 G:2 H:1 K:3 L:2 M:1 R:1
AAA found	A:0.9 C*:3.3 F:1.0 G:1.9 H:1.0 K:2.9 L:2.0 M:1.0 R:1.0 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	71%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 02/2013

Quality control:

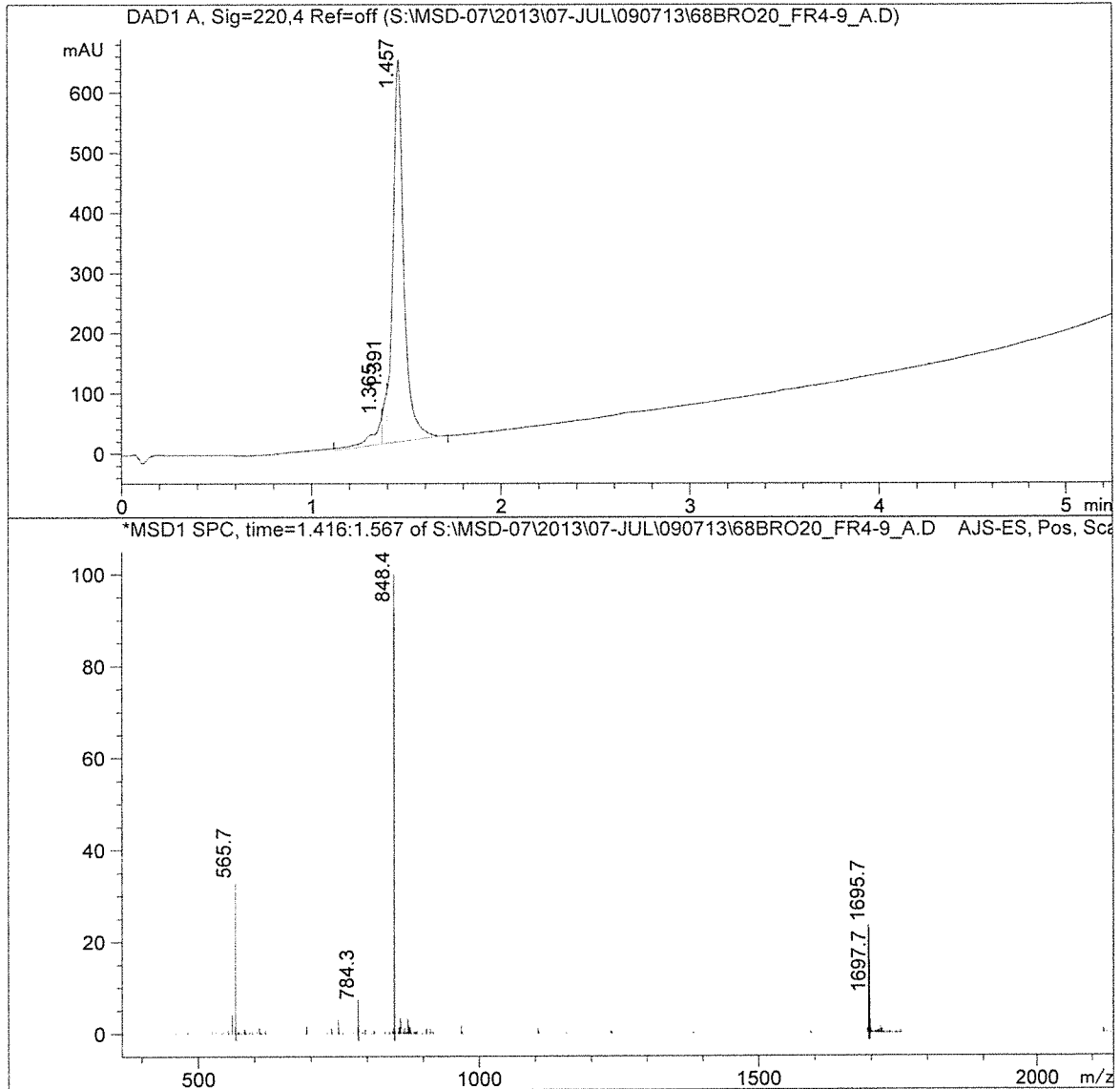
  
KOLLIS

(Analytical Data see next pages)

Injection Date : Tue, 9. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx020  
 Lot# 21168  
 JPT Lot# 030613Y-42

Sample Info : no sample info provided



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.365	0.1	164.3	5.9
2	1.391	0.0	122.8	4.4
3	1.457	0.1	2494.9	89.7

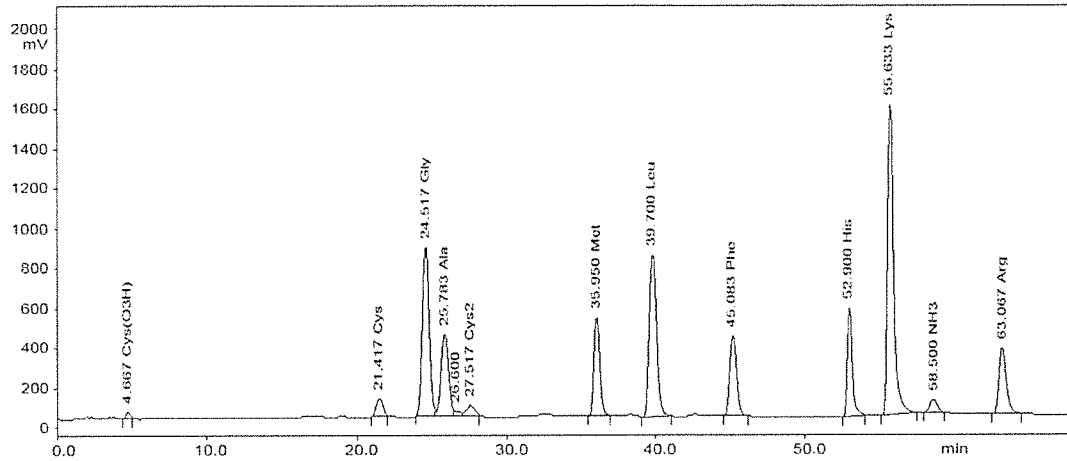
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_20

Chromatogram: I:\JPT\Proben\2013\1307\130713\ASA1\Chromatogramme\A1-5700099

Injected on: 15.07.2013

Injected at: 13:52



Calculation Method : External Standard

Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Cys(O3H)	4.667	285768	10.645
2	Cys	21.417	1299356	725.789
3	Gly	24.517	12031657	463.325
4	Ala	25.783	6471401	230.439
5		26.600	316271	0.000
6	Cys2	27.517	988975	67.822
7	Met	35.950	5773846	234.871
8	Leu	39.700	12345260	480.633
9	Phe	45.083	5817454	236.163
10	His	52.900	5119488	250.184
11	Lys	55.633	18710982	703.818
12	NH3	58.500	1095698	37.503
13	Arg	63.067	5169814	237.329

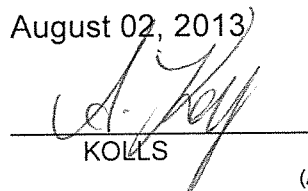
## Analytical Data Sheet

**JE.#** 21168\_21  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_021  
 H-MHCKKKGCRCLGEGHG-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 030613Y-43  
**Molecular weight (net)** 1615,91 g/mol

Tests	Results
Appearance	lyophilized material
MS	1618.5 [M+H] <sup>+</sup> ESI 808.4 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	C*:3 E:1 G:4 H:2 K:2 L:1 M:1 R:1
AAA found	C*:3.0 E:1.0 G:3.9 H:1.9 K:2.0 L:1.0 M:0.9 R:1.0 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	70%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013)

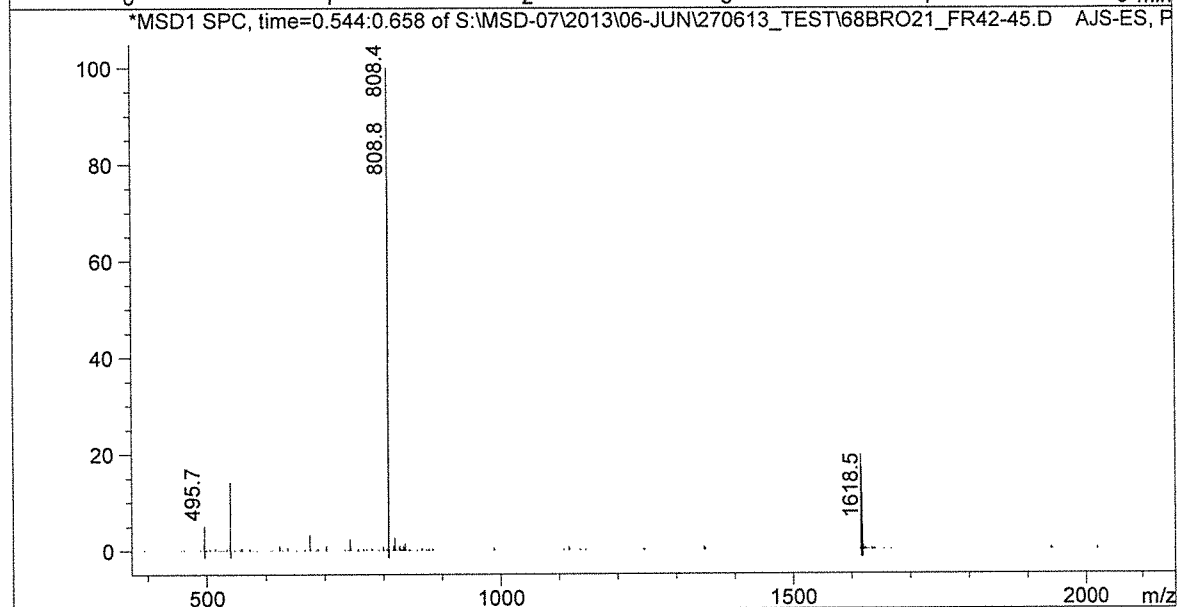
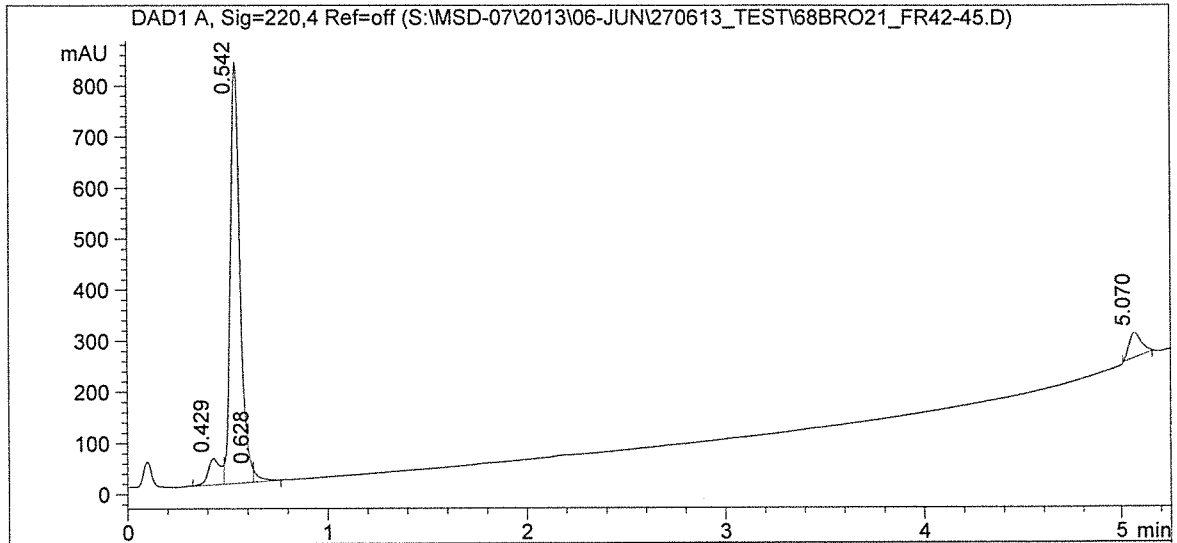
Quality control:

  
 KOLLS

(Analytical Data see next pages)

Injection Date : Thu, 27. Jun. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M  
 Sample Info : no sample info provided

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx021  
 Lot# 21168  
 JPT Lot# 030613Y-43

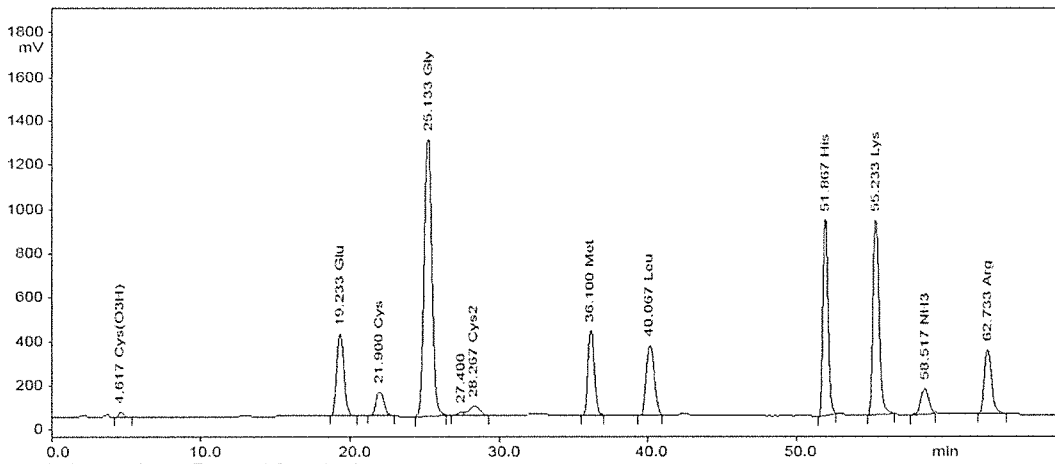


Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	0.429	0.1	236.8	7.3
2	0.542	0.1	2759.3	84.9
3	0.628	0.0	46.8	1.4
4	5.070	0.1	207.5	6.4

\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_21  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700033  
 Injected on: 06.07.2013 Injected at: 11:17



Calculation Method : External Standard  
 Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Cys(O3H)	4.617	285945	10.869
2	Glu	19.233	5640315	214.303
3	Cys	21.900	1967299	522.260
4	Gly	25.133	20421896	813.963
5		27.400	238049	0.000
6	Cys2	28.267	1116566	79.768
7	Met	36.100	5082876	193.623
8	Leu	40.067	5396750	207.704
9	His	51.867	8727370	381.545
10	Lys	55.233	11056093	404.816
11	NH3	58.517	1894591	69.918
12	Arg	62.733	4489073	204.480



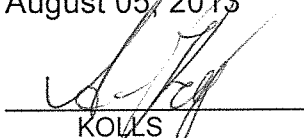
## Analytical Data Sheet

**JE.#** 21168\_22\_W1  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product** SIVmac239 Vpx\_022  
**Sequence** H-KGCRCLGEGHGAGGW-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 040713V-23  
**Molecular weight (net)** 1487,66 g/mol

Tests	Results
Appearance	lyophilized material
MS	1489.6 [M+H] <sup>+</sup> ESI 744.4 [M+2H] <sup>2+</sup> ESI 496.7 [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 C*:2 E:1 G:6 H:1 K:1 L:1 R:1 W*:1
AAA found	A:1.0 C*:1.5 E:1.0 G:5.7 H:1.1 K:0.9 L:1.0 R:0.8 W*:0.6 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	76%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 05/2013

Quality control:

  
 KOLLS

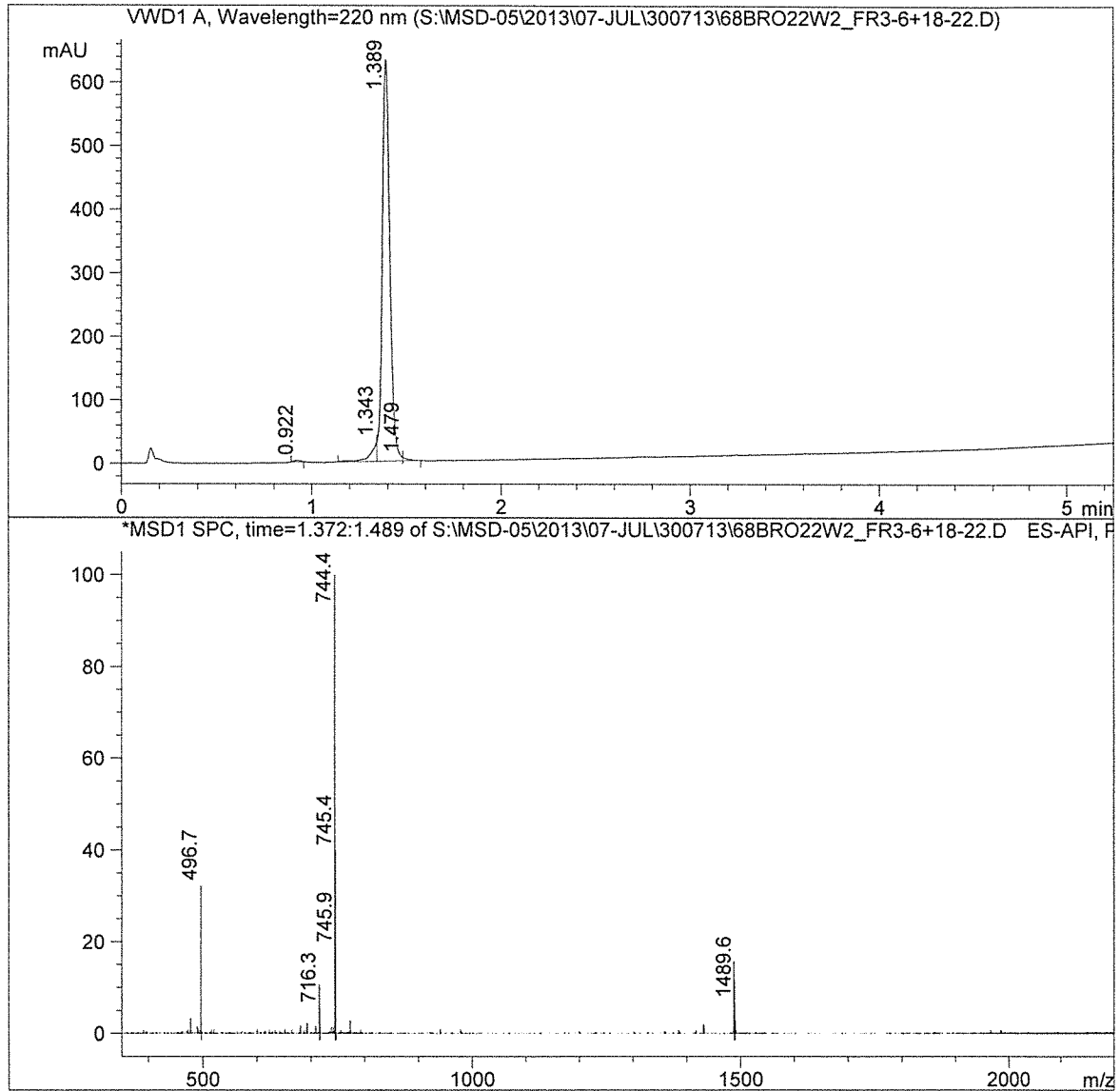
(Analytical Data see next pages)



Injection Date : Tue, 30. Jul. 2013  
 Sample Name :  
 Acq Operator : ks  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used : Je\_468  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx022  
 Lot# 21168  
 JPT Lot# 040713V-23

Sample Info : no sample info provided

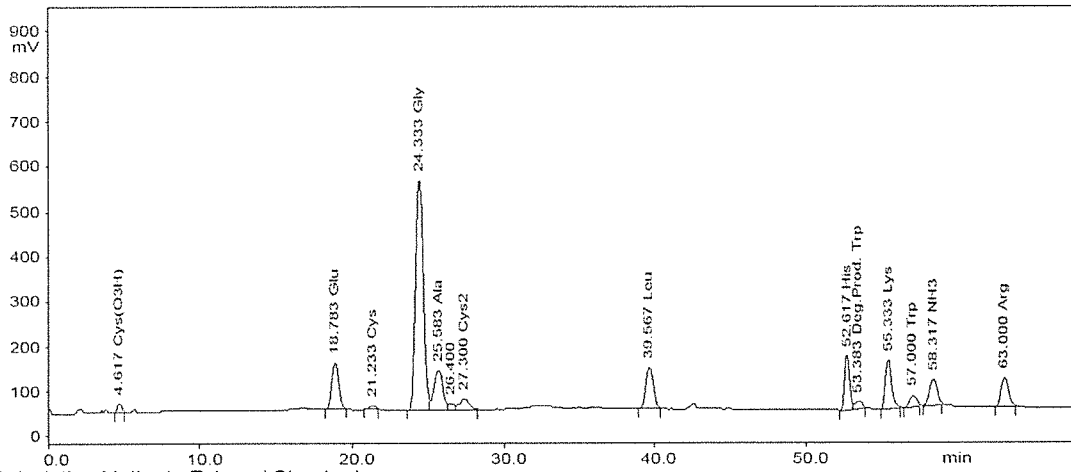


Signal 2: VWD1 A, Wavelength=220 nm

Peak #	RT [min]	Width [min]	Area	Area %
1	0.922	0.0	6.3	0.3
2	1.343	0.0	71.9	3.9
3	1.389	0.0	1738.4	95.2
4	1.479	0.0	10.1	0.6

\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_22  
 Chromatogram: I:\JPT\Proben\2013\1308\130801\Chromatogramme\A1-5700004  
 Injected on: 03.08.2013 Injected at: 16:23



Calculation Method : External Standard

Calibration Method : One Point

Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Cys(O3H)	4.617	176542	13.721
2	Glu	18.783	1497602	115.799
3	Cys	21.233	116381	88.853
4	Gly	24.333	8284559	655.481
5	Ala	25.583	1670976	120.926
6		26.400	199045	0.000
7	Cys2	27.300	499391	68.698
8	Leu	39.567	1452442	112.474
9	His	52.617	1193732	121.875
10	Deg. Prod. Trp	53.383	264852	24.358
11	Lys	55.333	1355272	105.119
12	Trp	57.000	370555	50.113
13	NH3	58.317	951217	65.629
14	Arg	63.000	979775	98.311

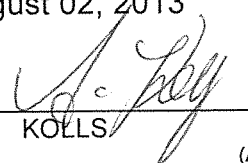
## Analytical Data Sheet

**JE.#** 21168\_23  
**PO.#**  
**Customer** Fisher BioServices Inc.  
 Dr. Bruce Brown  
**Product Sequence** SIVmac239 Vpx\_023  
 H-CLGEGHGAGGWRPGP-OH  
**Amount** 1,0 mg (net)  
**Batch no.** 110613B9  
**Molecular weight (net)** 1450,59 g/mol

Tests	Results
Appearance	lyophilized material
MS	- [M+H] <sup>+</sup> ESI 725.8 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 C*:1 E:1 G:6 H:1 L:1 P:2 R:1 W*:1
AAA found	A:1.0 C*:1.0 E:1.0 G:5.6 H:1.0 L:0.9 P:2.1 R:1.0 W*:0.9 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	72%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C
	Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

  
 KOLLS

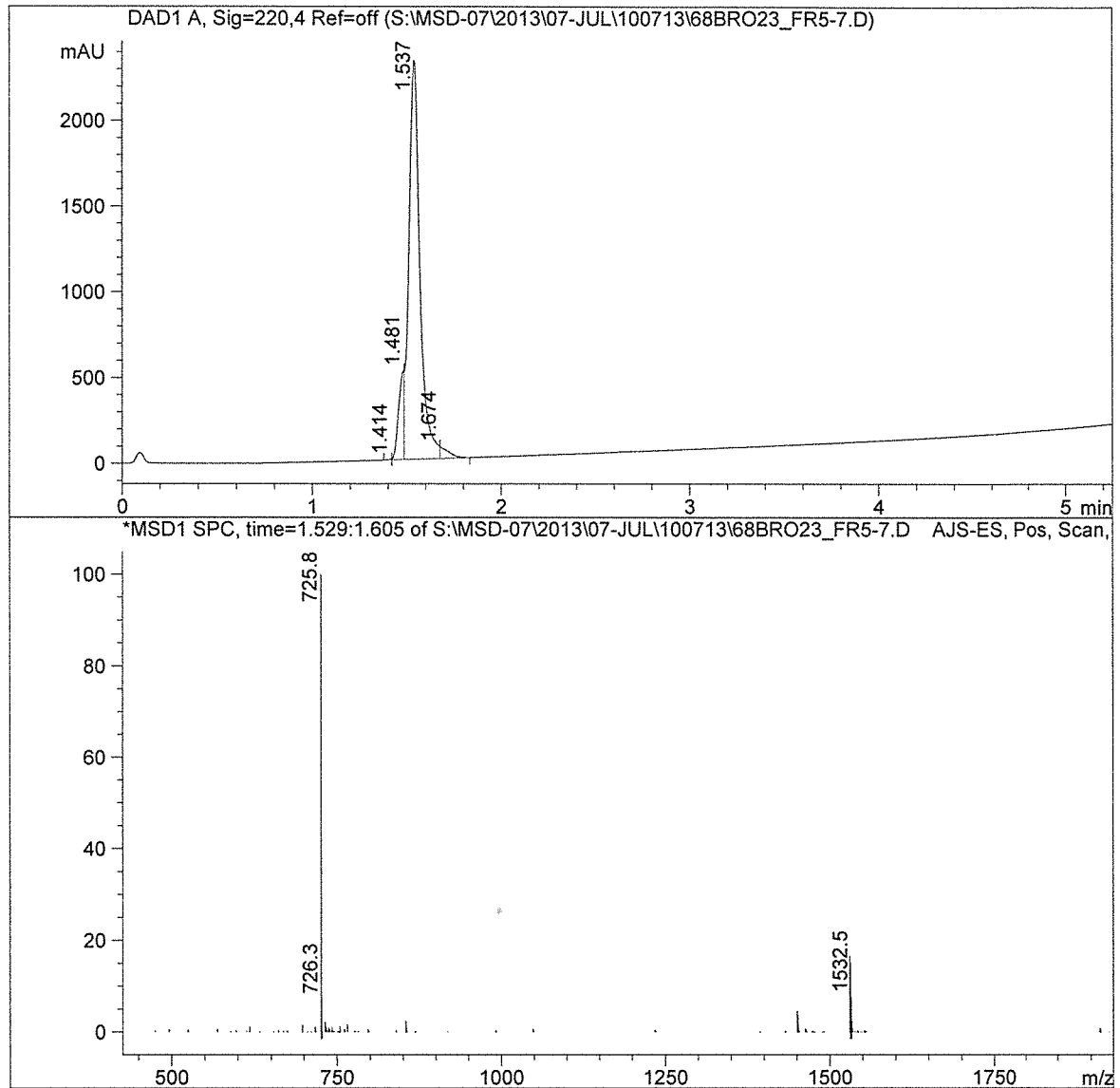
(Analytical Data see next pages)



Injection Date : Wed, 10. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx023  
 Lot# 21168  
 JPT Lot# 110613B9

Sample Info : no sample info provided



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.414	0.0	4.1	0.0
2	1.481	0.0	1077.0	10.1
3	1.537	0.1	9379.5	87.9
4	1.674	0.0	205.3	1.9

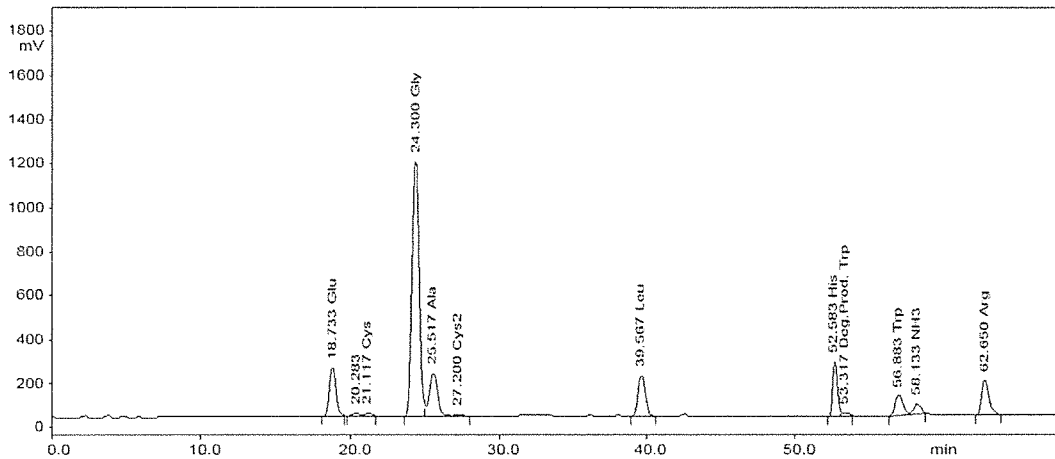
\*\*\* End of Report \*\*\*

Sample Identifier: 21168\_23

Chromatogram: I:\JPT\Proben\2013\1307\130718\ASA1\Chromatogramme\A1-5700132

Injected on: 19.07.2013

Injected at: 21:31



Calculation Method : External Standard

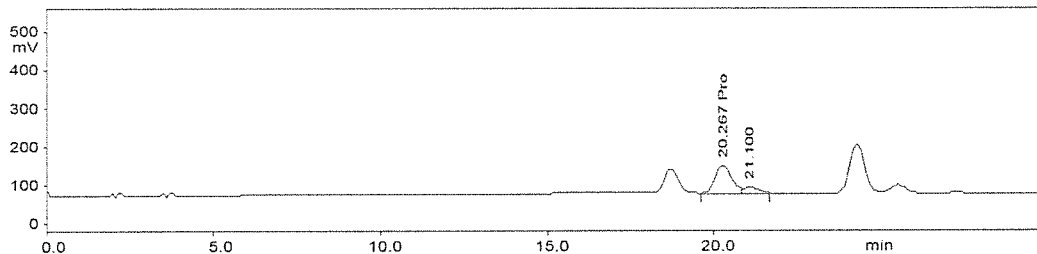
Calibration Method : One Point

Factor: 3.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Glu	18.733	3010940	350.164
2		20.283	251310	0.000
3	Cys	21.117	268185	330.816
4	Gly	24.300	17500396	2060.736
5	Ala	25.517	3545170	379.687
6	Cys2	27.200	153552	32.759
7	Leu	39.567	2850116	335.984
8	His	52.583	2324790	359.171
9	Deg.Prod. Trp	53.317	191940	27.647
10	Trp	56.883	1498131	292.783
11	NH3	58.133	757188	84.595
12	Arg	62.650	2429826	356.547

Sample Identifier: 21168\_23

Chromatogram: I:\JPT\Proben\2013\1307\130718\ASA1\Chromatogramme\A1-4400132



Calculation Method : External Standard

Calibration Method : One Point

Factor: 3.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	20.267	1264400	772.002
2		21.100	212632	0.000



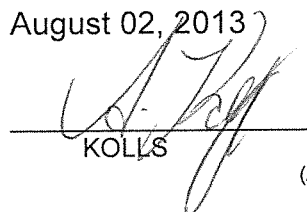
## Analytical Data Sheet

JE.# 21168\_24  
PO.#  
Customer Fisher BioServices Inc.  
Dr. Bruce Brown  
Product SIVmac239 Vpx\_024  
Sequence H-GHGAGGWRPGPPPPP-OH  
Amount 1,0 mg (net)  
Batch no. 070613C8  
Molecular weight (net) 1436,61 g/mol

Tests	Results
Appearance	lyophilized material
MS	1437.6 [M+H] <sup>+</sup> ESI 718.9 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	A:1 G:5 H:1 P:6 R:1 W*:1
AAA found	A:1.0 G:4.8 H:1.0 P:5.9 R:1.0 W*:0.8 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	73%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

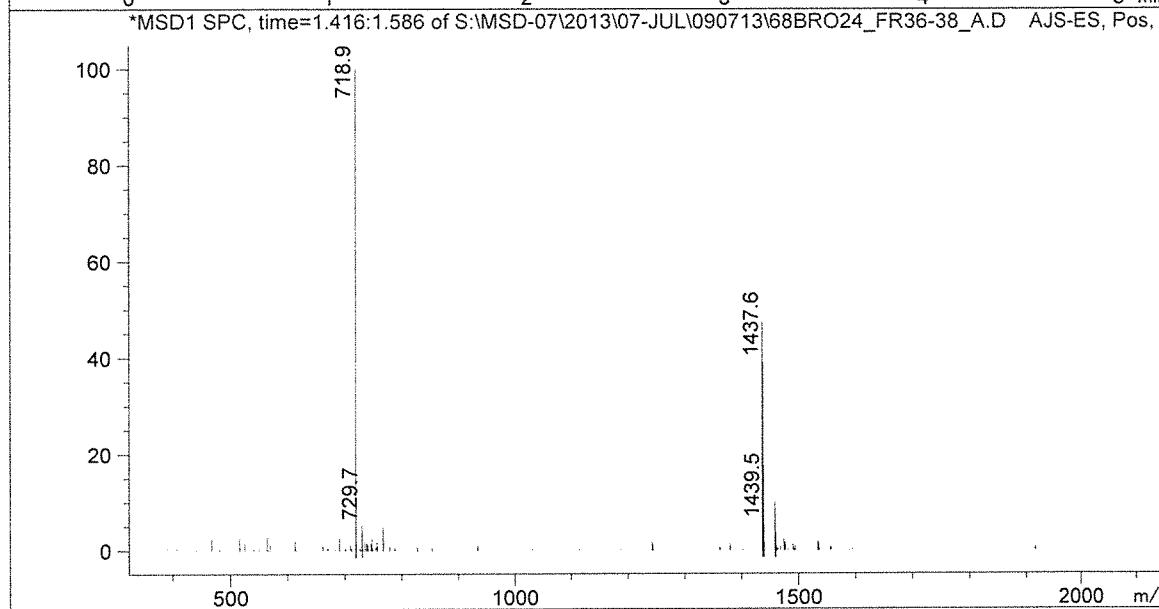
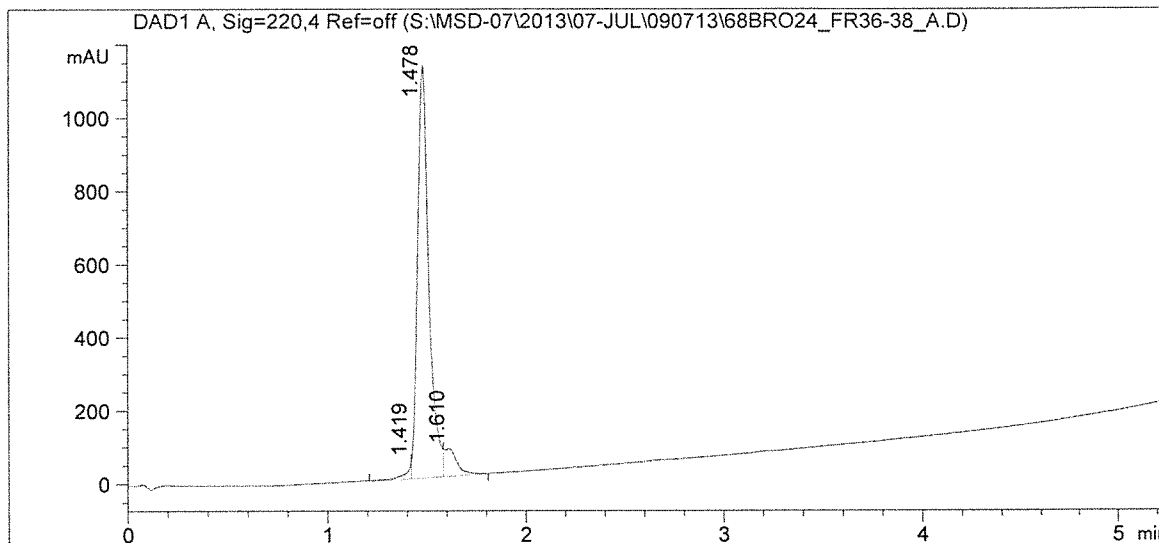
  
KOLLS

(Analytical Data see next pages)

Injection Date : Tue, 9. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx024  
 Lot# 21168  
 JPT Lot# 070613C8

Sample Info : no sample info provided



Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.419	0.0	114.1	2.3
2	1.478	0.1	4416.0	90.6
3	1.610	0.1	341.5	7.0

\*\*\* End of Report \*\*\*

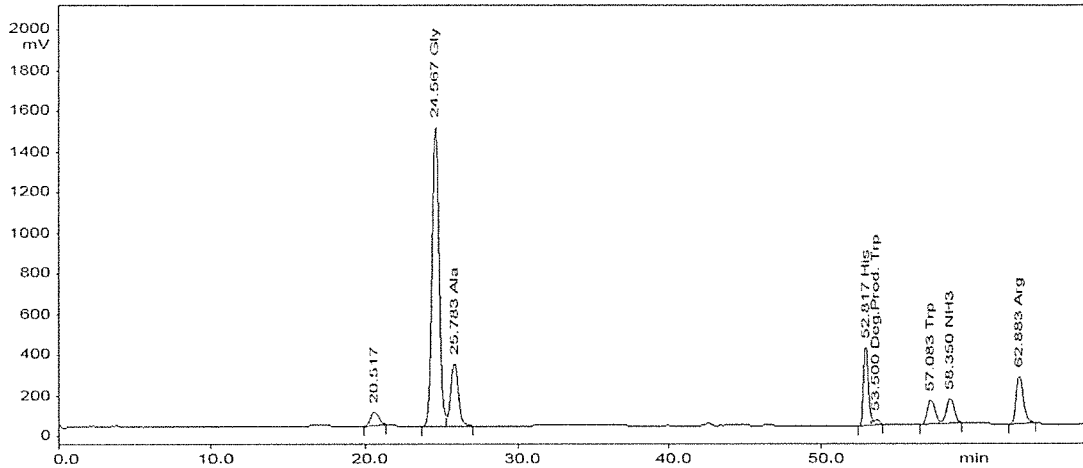


Sample Identifier: 21168\_24

Chromatogram: I:\JPT\Proben\2013\1307\130713\ASA1\Chromatogramme\A1-5700100

Injected on: 15.07.2013

Injected at: 15:36



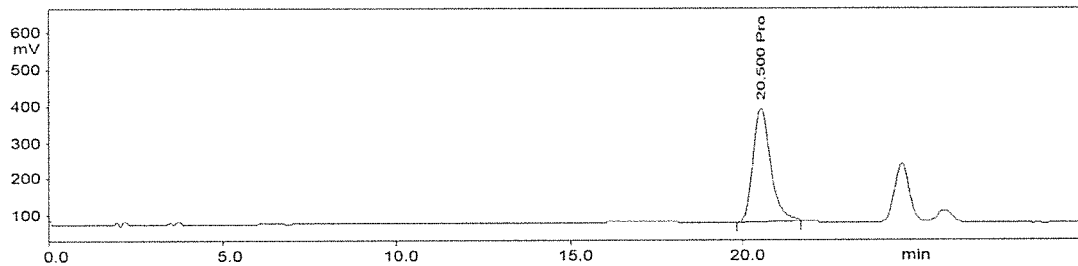
Calculation Method : External Standard

Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1		20.517	1252277	0.000
2	Gly	24.567	21149414	814.439
3	Ala	25.783	4884482	173.931
4	His	52.817	3460566	169.115
5	Deg. Prod. Trp	53.500	280259	12.334
6	Trp	57.083	2001196	123.304
7	NH3	58.350	1978423	67.717
8	Arg	62.883	3579109	164.305

Sample Identifier: 21168\_24

Chromatogram: I:\JPT\Proben\2013\1307\130713\ASA1\Chromatogramme\A1-4400100



Calculation Method : External Standard

Calibration Method : One Point

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	20.500	5476177	997.928



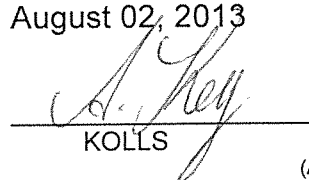
## Analytical Data Sheet

JE.# 21168\_25  
PO.#  
Customer Fisher BioServices Inc.  
Dr. Bruce Brown  
Product SIVmac239 Vpx\_025  
Sequence H-GGWRPGPPPPPPGL-OH  
Amount 1,0 mg (net)  
Batch no. 030613Y-45  
Molecular weight (net) 1478,74 g/mol

Tests	Results
Appearance	lyophilized material
MS	1479.6 [M+H] <sup>+</sup> ESI 739.9 [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient) (see raw data enclosed)
AAA calcd.	G:4 L:1 P:8 R:1 W*:1
AAA found	G:3.8 L:1.0 P:8.2 R:1.0 W*:1.0 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	81%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 02, 2013

Quality control:

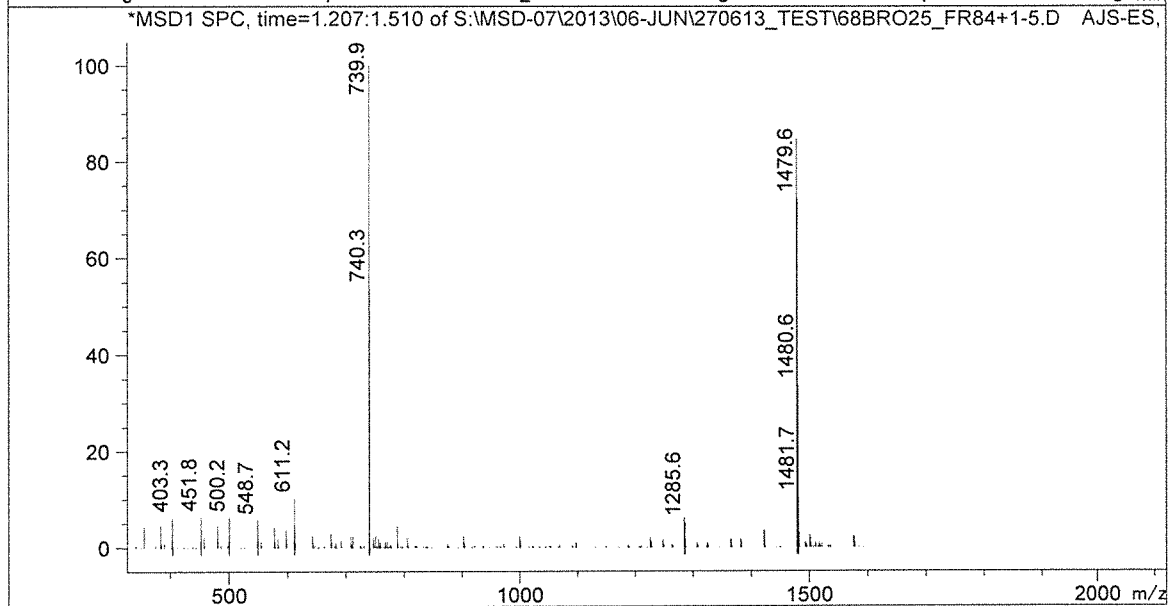
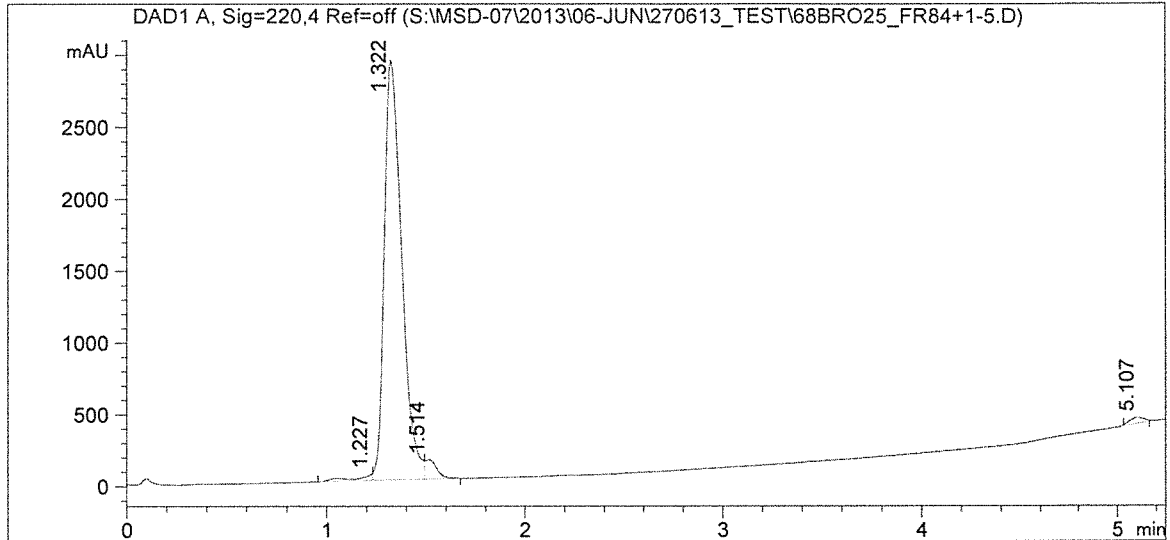
  
KOLLS

(Analytical Data see next pages)

Injection Date : Thu, 27. Jun. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\DEF\_LC.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx025  
 Lot# 21168  
 JPT Lot# 030613Y-45

Sample Info : no sample info provided

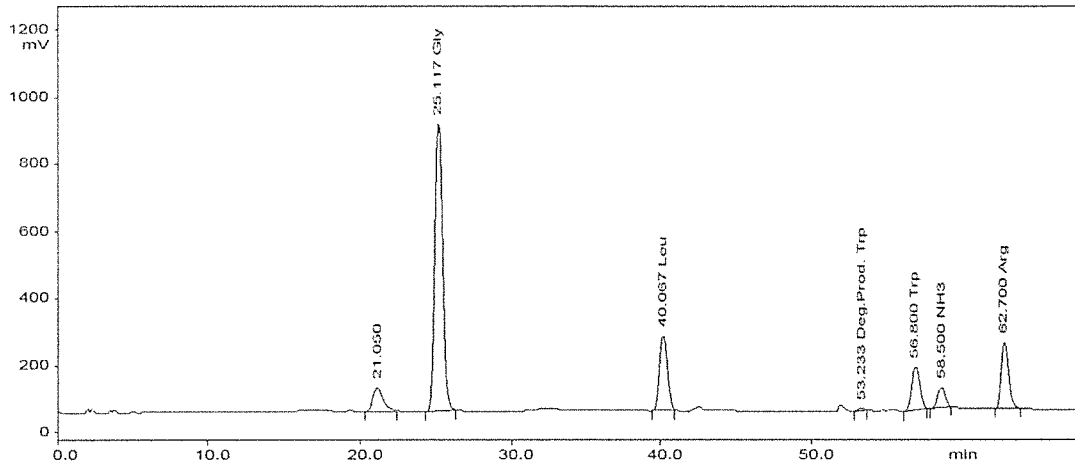


Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.227	0.1	255.1	1.4
2	1.322	0.1	17757.4	94.7
3	1.514	0.1	526.9	2.8
4	5.107	0.1	217.7	1.2

\*\*\* End of Report \*\*\*

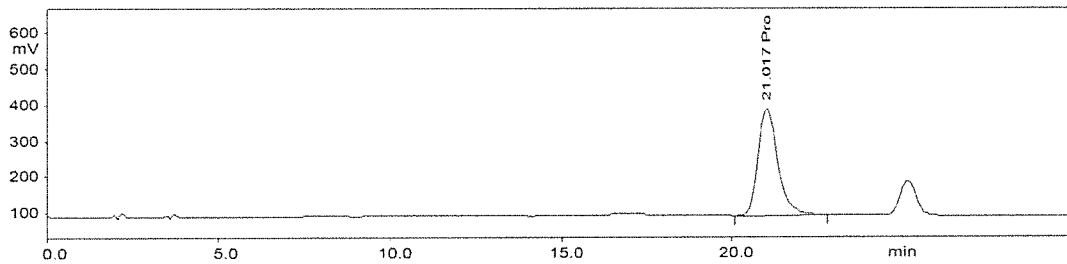
Sample Identifier: 21168\_25  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-5700034  
 Injected on: 06.07.2013 Injected at: 13:01



Calculation Method : External Standard  
 Calibration Method : One Point  
 Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1		21.050	1579397	0.000
2	Gly	25.117	13959664	1112.791
3	Leu	40.067	3741492	287.997
4	Deg. Prod. Trp	53.233	93141	8.443
5	Trp	56.800	2165843	275.569
6	NH3	58.500	1036003	76.466
7	Arg	62.700	3040087	276.956

Sample Identifier: 21168\_25  
 Chromatogram: I:\JPT\Proben\2013\1307\130702\ASA1\Chromatogramme\A1-4400034



Calculation Method : External Standard  
 Calibration Method : One Point  
 Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	21.017	6085953	2383.316



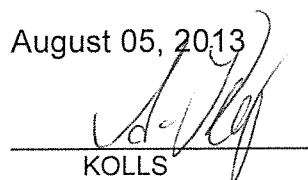
## Analytical Data Sheet

JE.# 21168\_26\_W1  
PO.#  
Customer Fisher BioServices Inc.  
Dr. Bruce Brown  
Product SIVmac239 Vpx\_026  
Sequence H-PGPPPPPPPGLA-OH  
Amount 1,0 mg (net)  
Batch no. 050713B4  
Molecular weight (net) 1093,32 g/mol

Tests	Results
Appearance	lyophilized material
MS	1093.5 [M+H] <sup>+</sup> ESI - [M+2H] <sup>2+</sup> ESI - [M+3H] <sup>3+</sup> ESI
Purity	>80% (HPLC - 220nm/ C18 - linear gradient)(mixture of cis/trans isomeres) (see raw data enclosed)
AAA calcd.	A:1 G:2 L:1 P:8
AAA found	A:1.0 G:2.0 L:1.0 P:8.0 (Non-normalized, see raw data enclosed. Amino acids labeled with an asterisk could not be properly determined due to incomplete hydrolysis or decomposition. Such amino acids were excluded from determination of the peptide content.)
Peptide content	76%
Remark	This product is supplied as a trifluoroacetate salt.
Storage conditions:	minus 20°C Use recommended within 6 months from manufacturing date.

Date: August 05, 2013

Quality control:

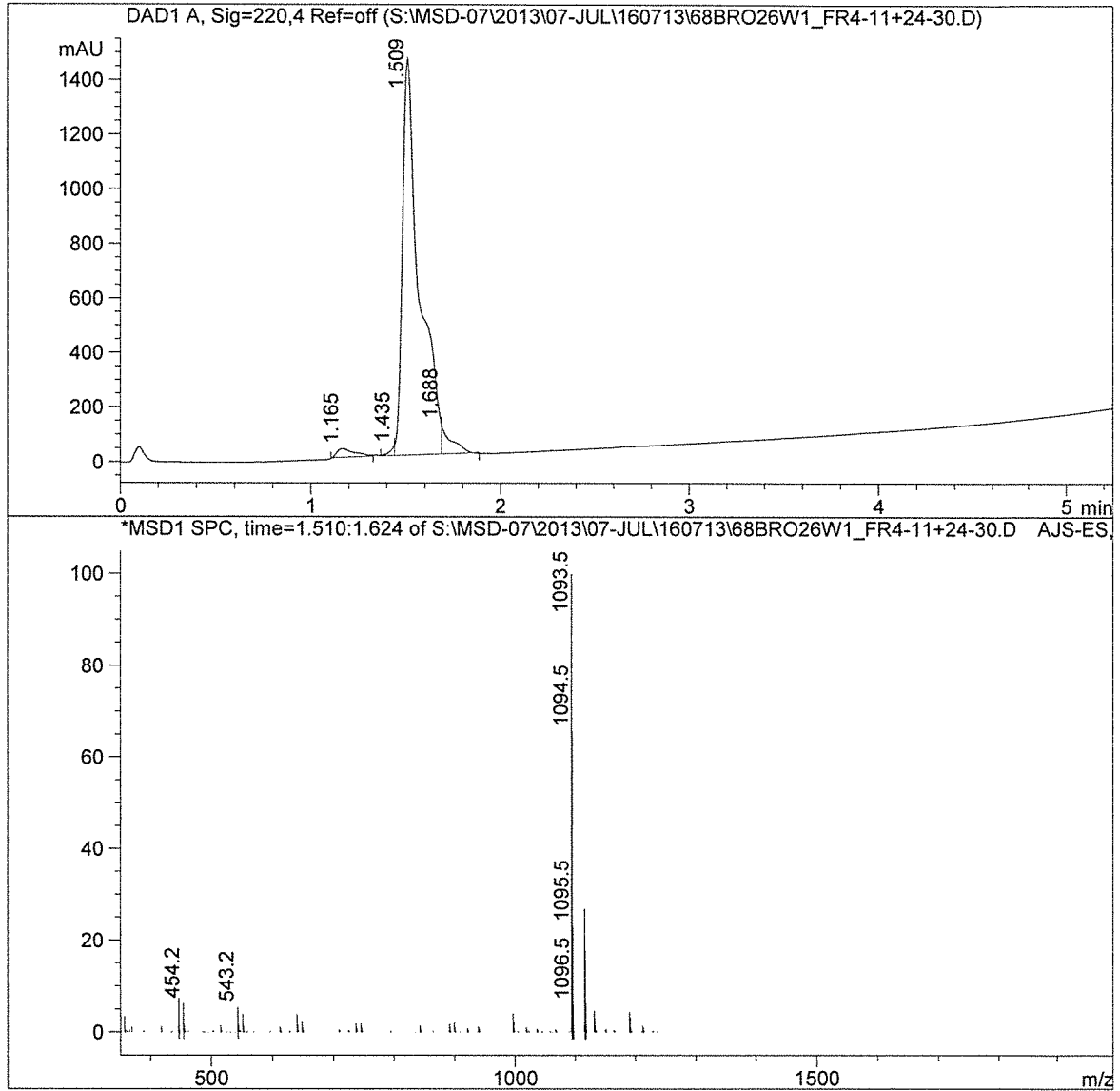
  
KOLLS

(Analytical Data see next pages)

Injection Date : Tue, 16. Jul. 2013  
 Sample Name :  
 Acq Operator : SYSTEM  
 Acq. Method : D:\METHODS\5-95-6M.M  
 column used :  
 Analysis Method : C:\CHEM32\1\METHODS\JPT-LCMS.M

NIH-ARP  
 Cat#6450\_SIVmac239\_Vpx026  
 Lot# 21168  
 JPT Lot# 050713B4

Sample Info : no sample info provided

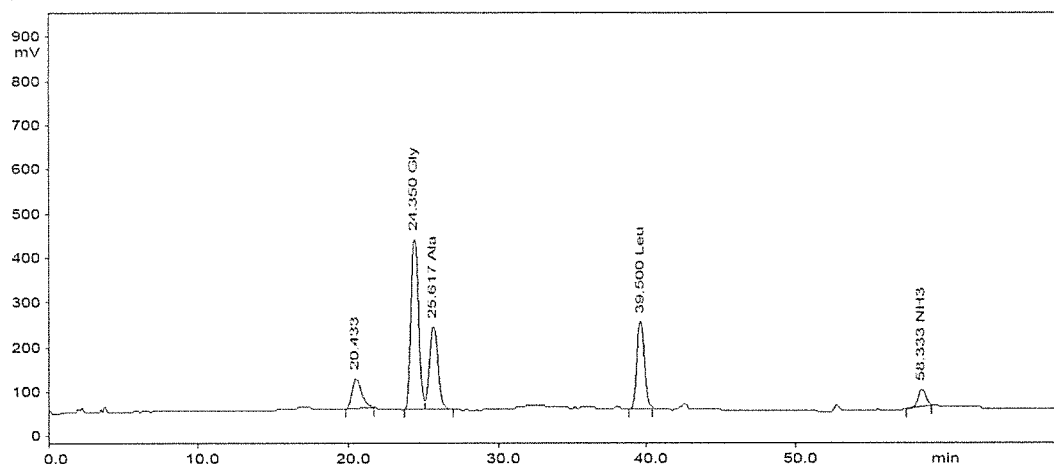


Signal 1: DAD1 A, Sig=220,4 Ref=off

Peak #	RT [min]	Width [min]	Area	Area %
1	1.165	0.1	199.2	2.1
2	1.435	0.0	63.3	0.7
3	1.509	0.1	8872.3	93.6
4	1.688	0.1	342.7	3.6

\*\*\* End of Report \*\*\*

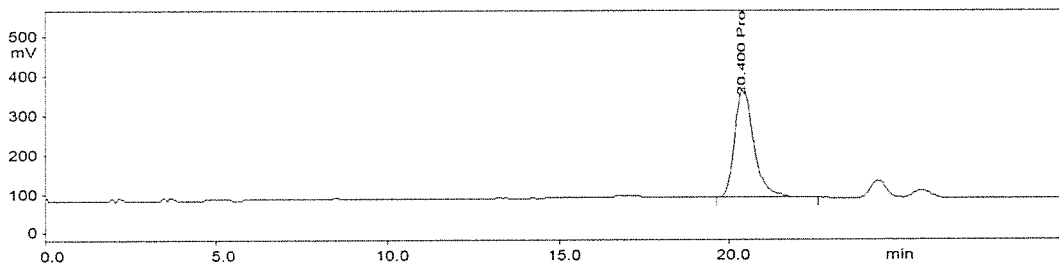
Sample Identifier: 21168\_26  
 Chromatogram: I:\JPT\Proben\2013\1308\130801\Chromatogramme\A1-5700005  
 Injected on: 03.08.2013 Injected at: 18:06



Calculation Method : External Standard  
 Calibration Method : One Point  
 Factor: 3.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1		20.433	1419802	0.000
2	Gly	24.350	6125448	726.975
3	Ala	25.617	3410137	370.178
4	Leu	39.500	3099834	360.067
5	NH3	58.333	669568	69.295

Sample Identifier: 21168\_26  
 Chromatogram: I:\JPT\Proben\2013\1308\130801\Chromatogramme\A1-4400005



Calculation Method : External Standard  
 Calibration Method : One Point  
 Factor: 2.000000e+000

Peak No.	Name	Retention Time	Area	Absolute nmol
1	Pro	20.400	5512197	1963.609