

Supporting Information

Modified Linear Peptides Effectively Silence STAT-3 in Breast Cancer and Ovarian Cancer Cell lines

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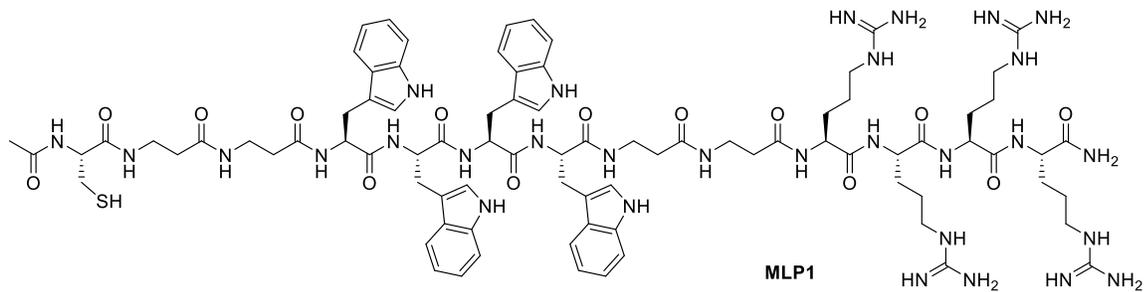
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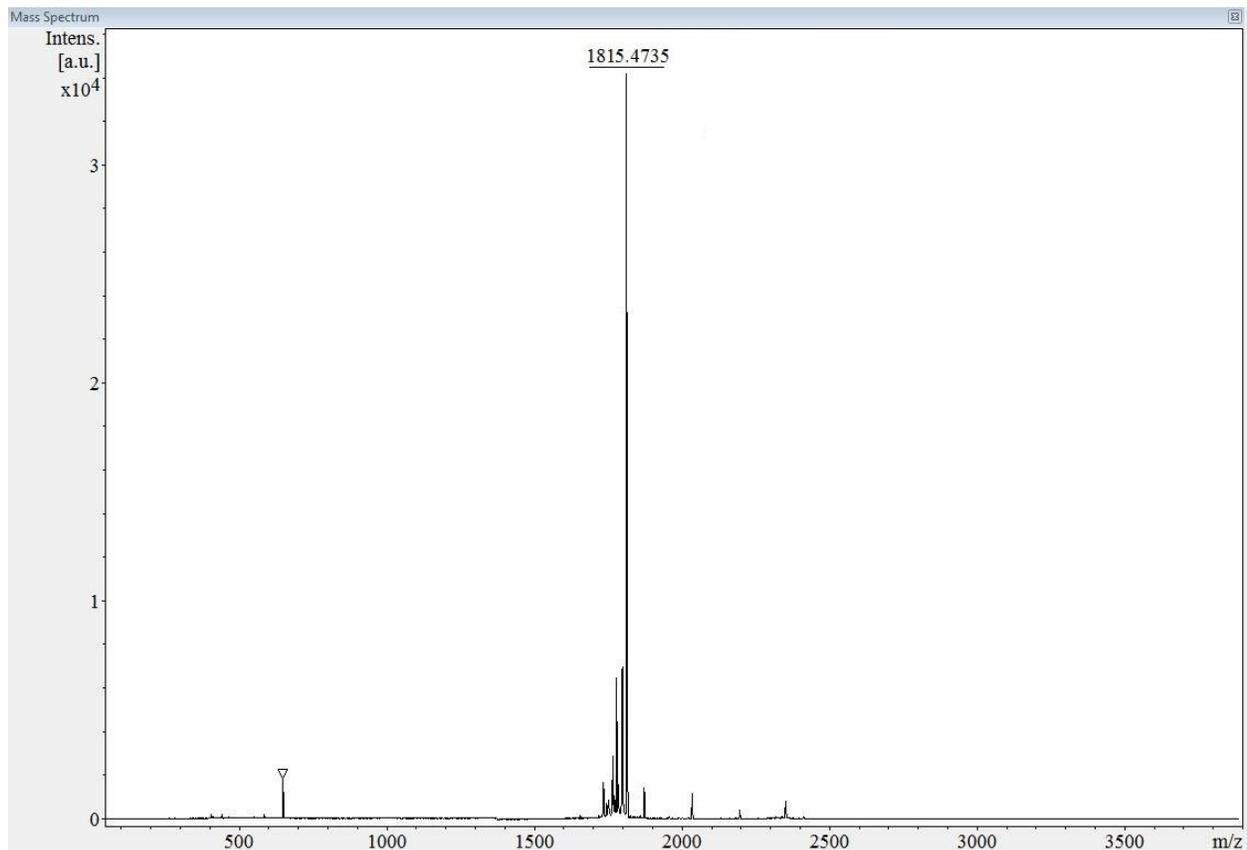
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Supplementary Figure S1. Mass Spectra of Synthesized Peptides.

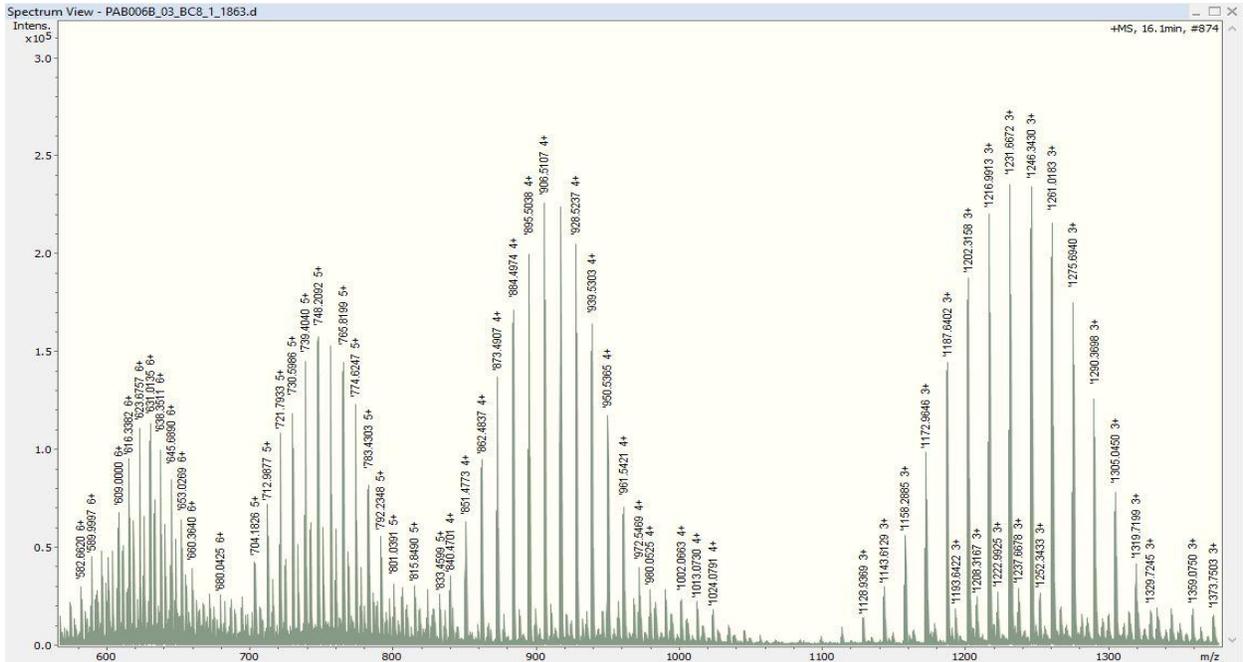
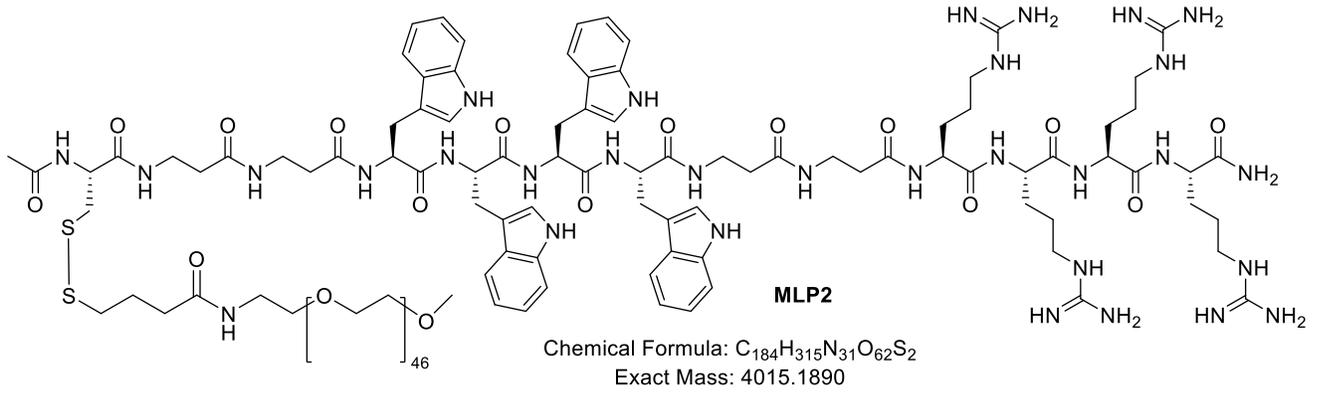
A. MLP1



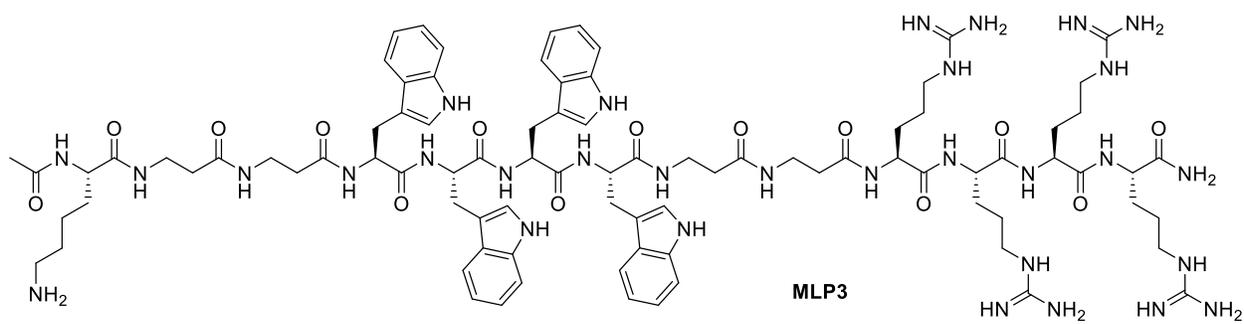
Chemical Formula: $C_{85}H_{118}N_{30}O_{14}S$
Exact Mass: 1814.9164



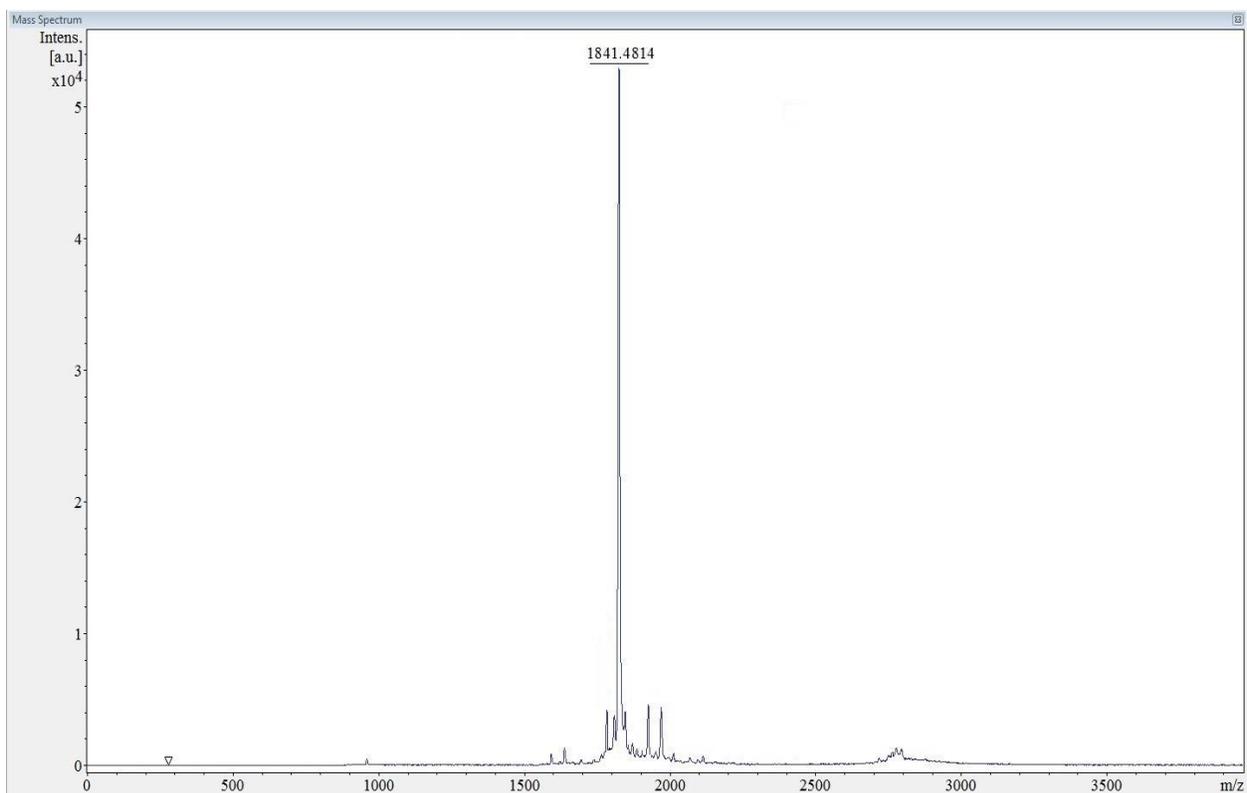
B. MLP2



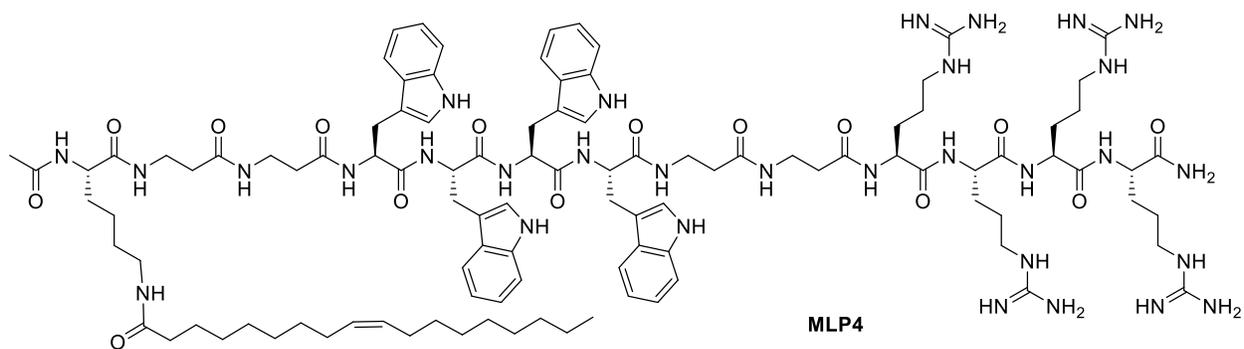
C. MLP 3



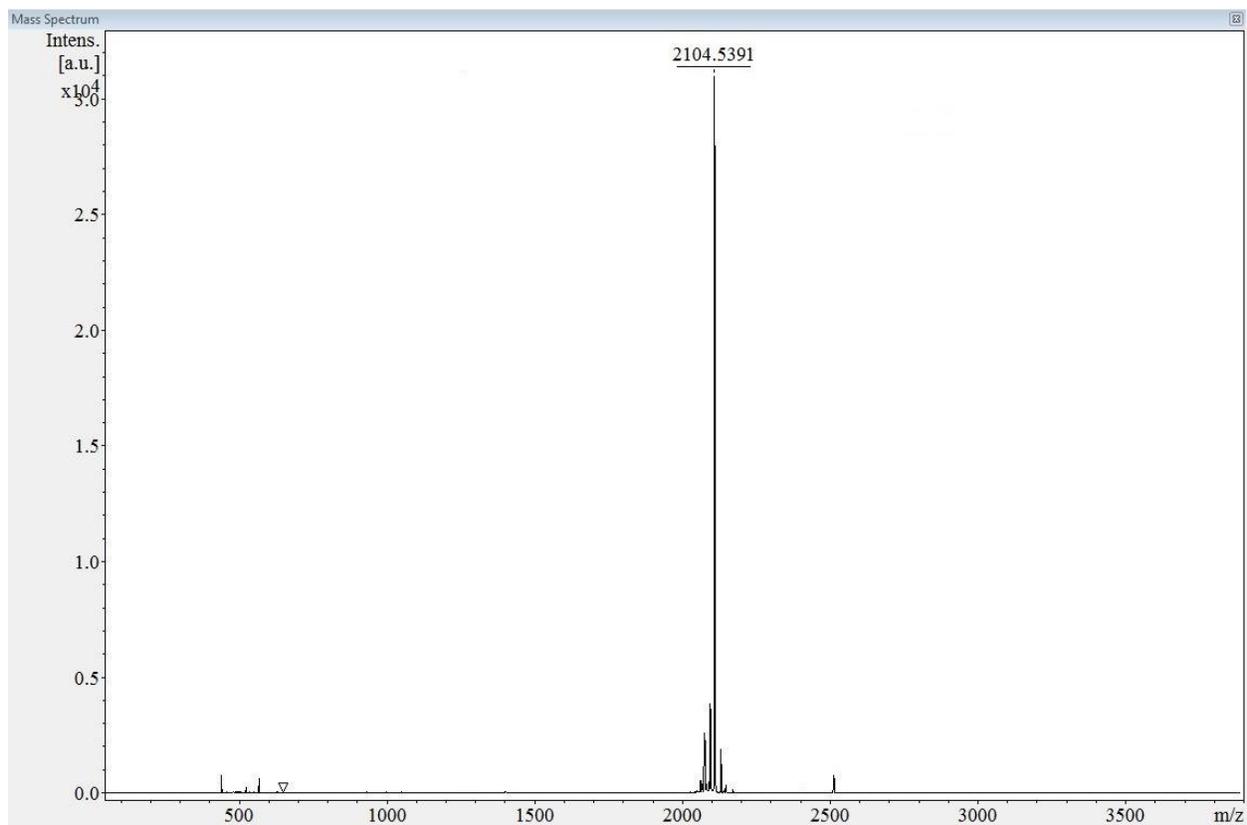
Chemical Formula: $C_{88}H_{125}N_{31}O_{14}$
Exact Mass: 1840.0022



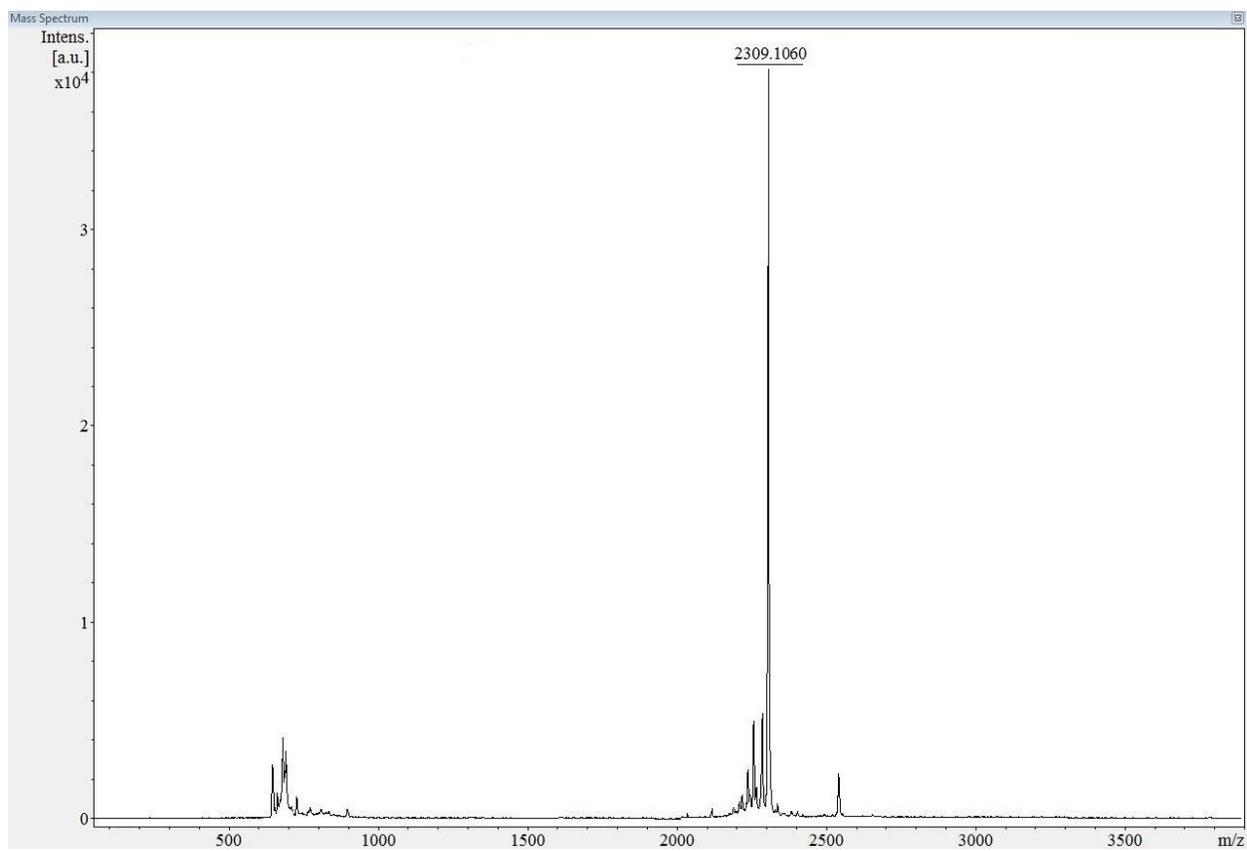
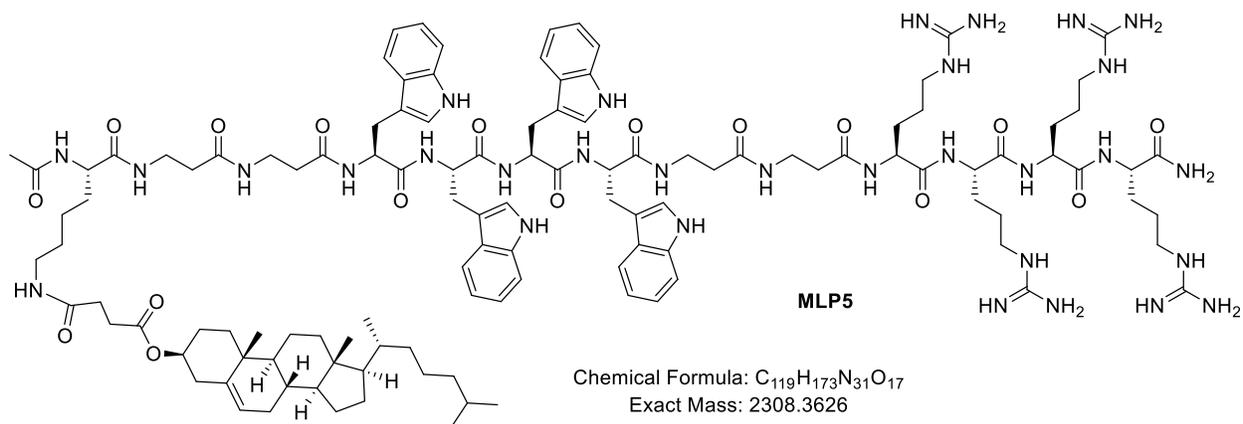
D. MLP4



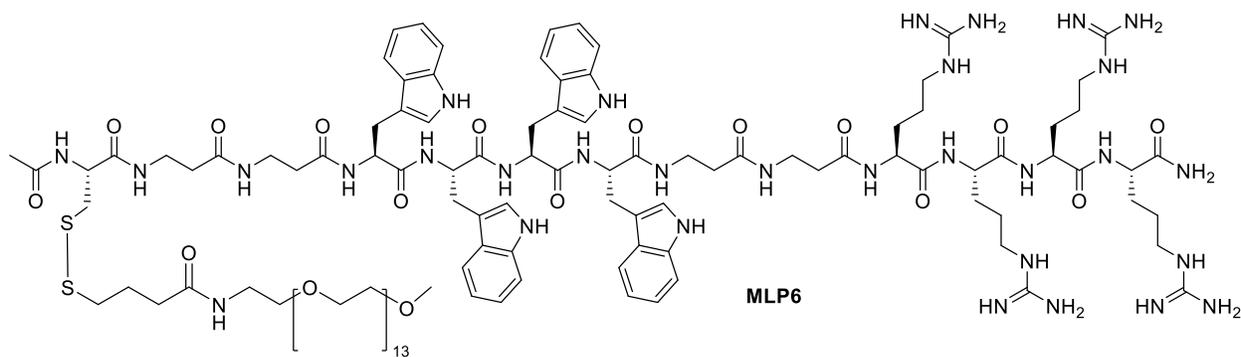
Chemical Formula: $C_{106}H_{157}N_{31}O_{15}$
Exact Mass: 2104.2475



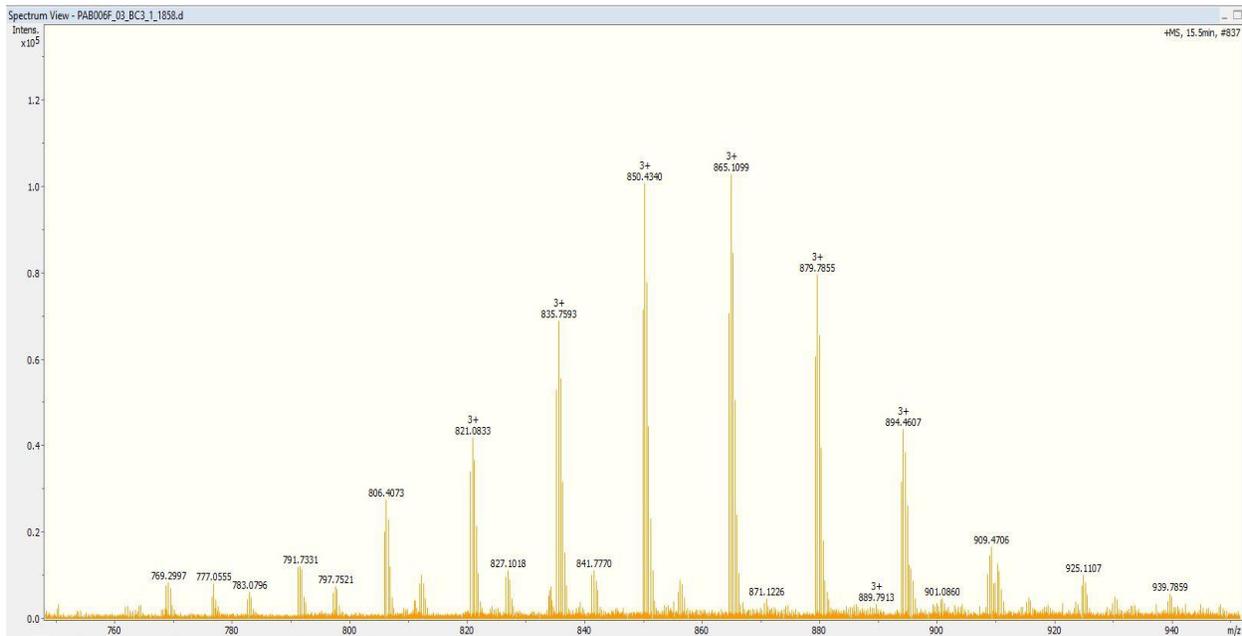
E. MLP5



F. MLP6



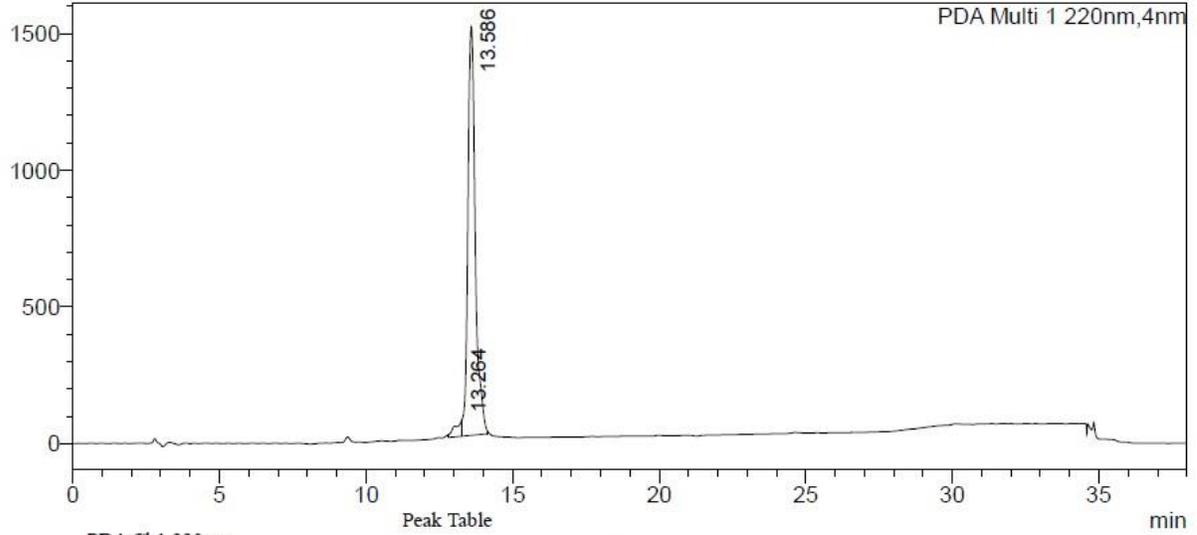
Chemical Formula: $C_{118}H_{183}N_{31}O_{29}S_2$
Exact Mass: 2562.3239



Supplementary Figure S2. HPLC data for non-PEGylated Synthesized Peptides.

MLP-1

mAU

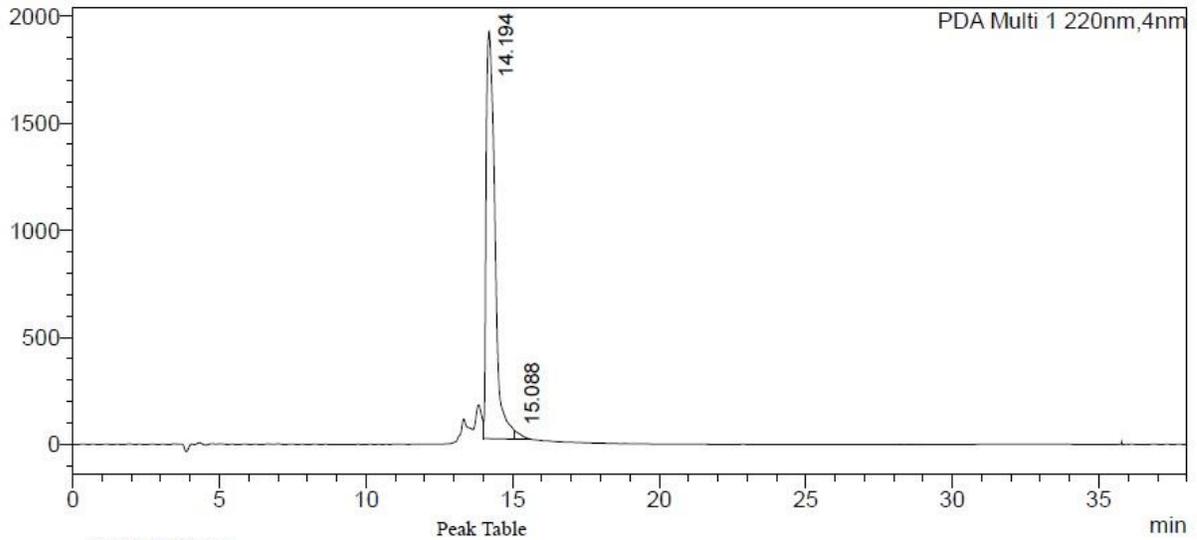


PDA Ch1 220nm

Peak#	Ret. Time	Area	Height	Area%
1	13.264	950749	56224	3.538
2	13.586	25919727	1495140	96.462
Total		26870476	1551364	100.000

MLP-3

mAU

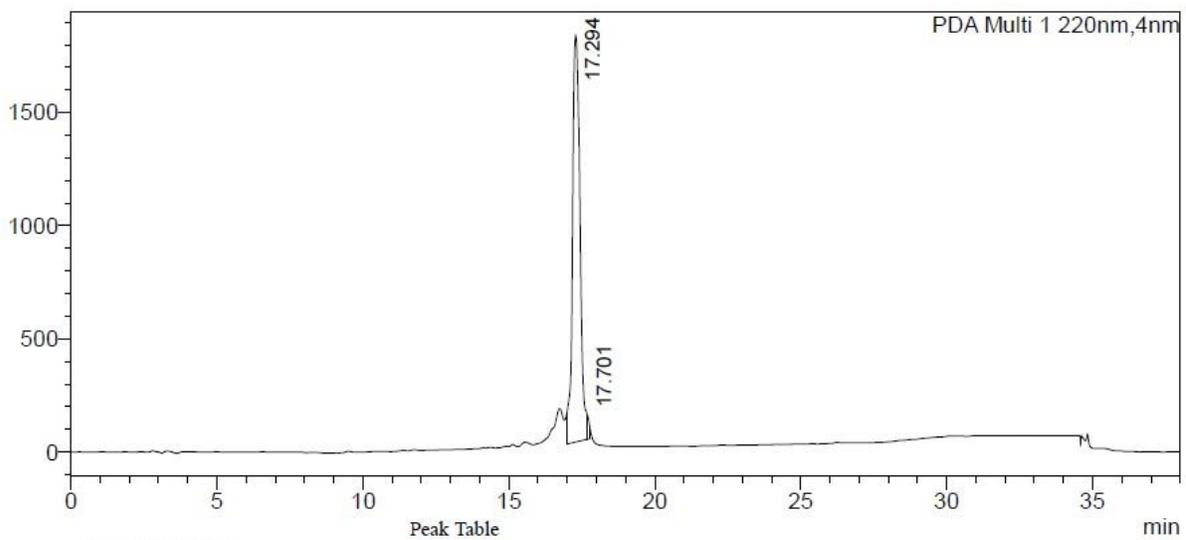


PDA Ch1 220nm

Peak#	Ret. Time	Area	Height	Area%
1	14.194	38872947	1901150	98.697
2	15.088	513293	37430	1.303
Total		39386240	1938580	100.000

MLP-4

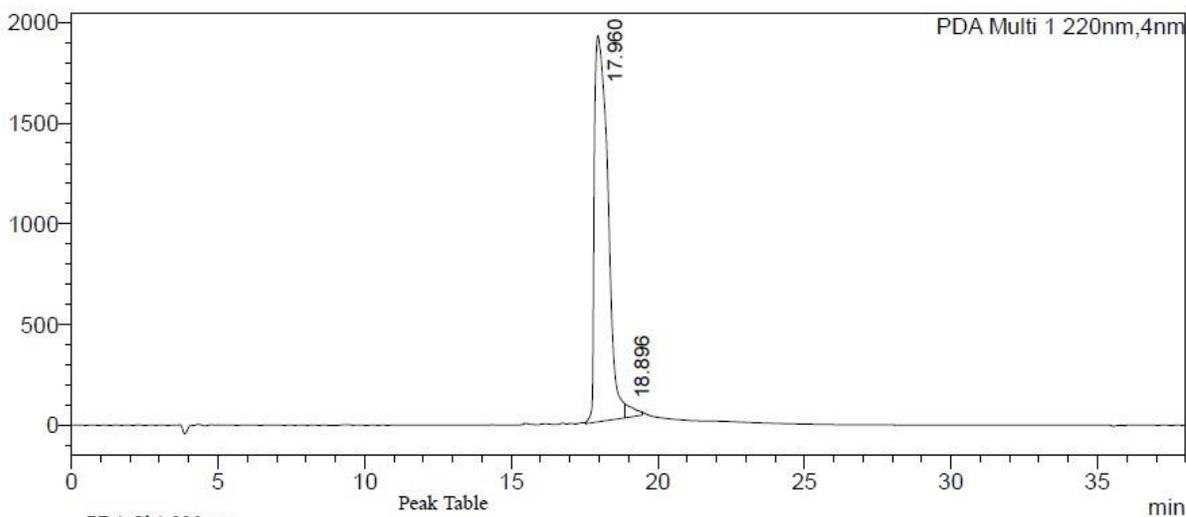
mAU



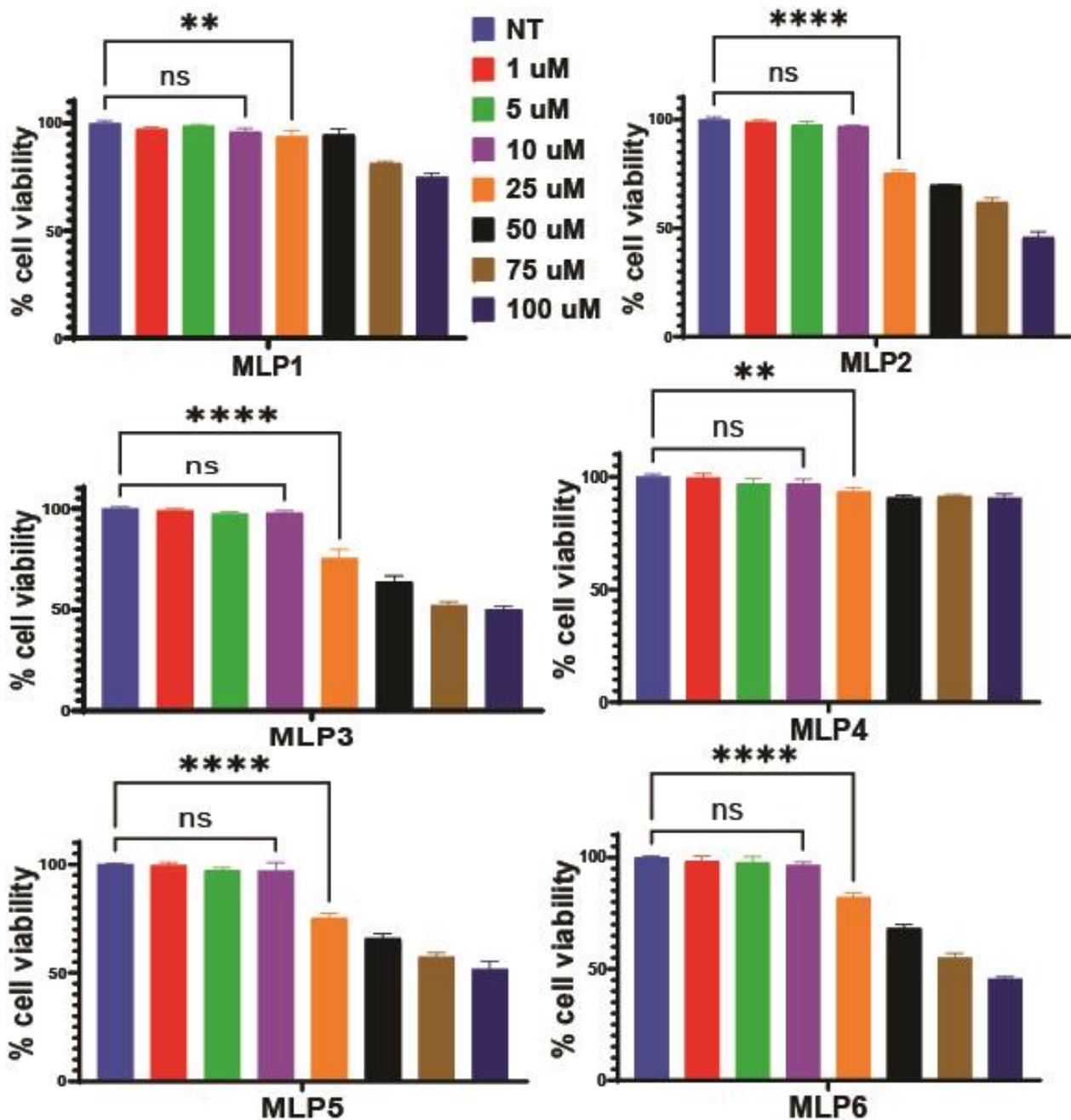
Peak#	Ret. Time	Area	Height	Area%
1	17.294	31754214	1796445	98.822
2	17.701	378541	106565	1.178
Total		32132755	1903010	100.000

MLP-5

mAU

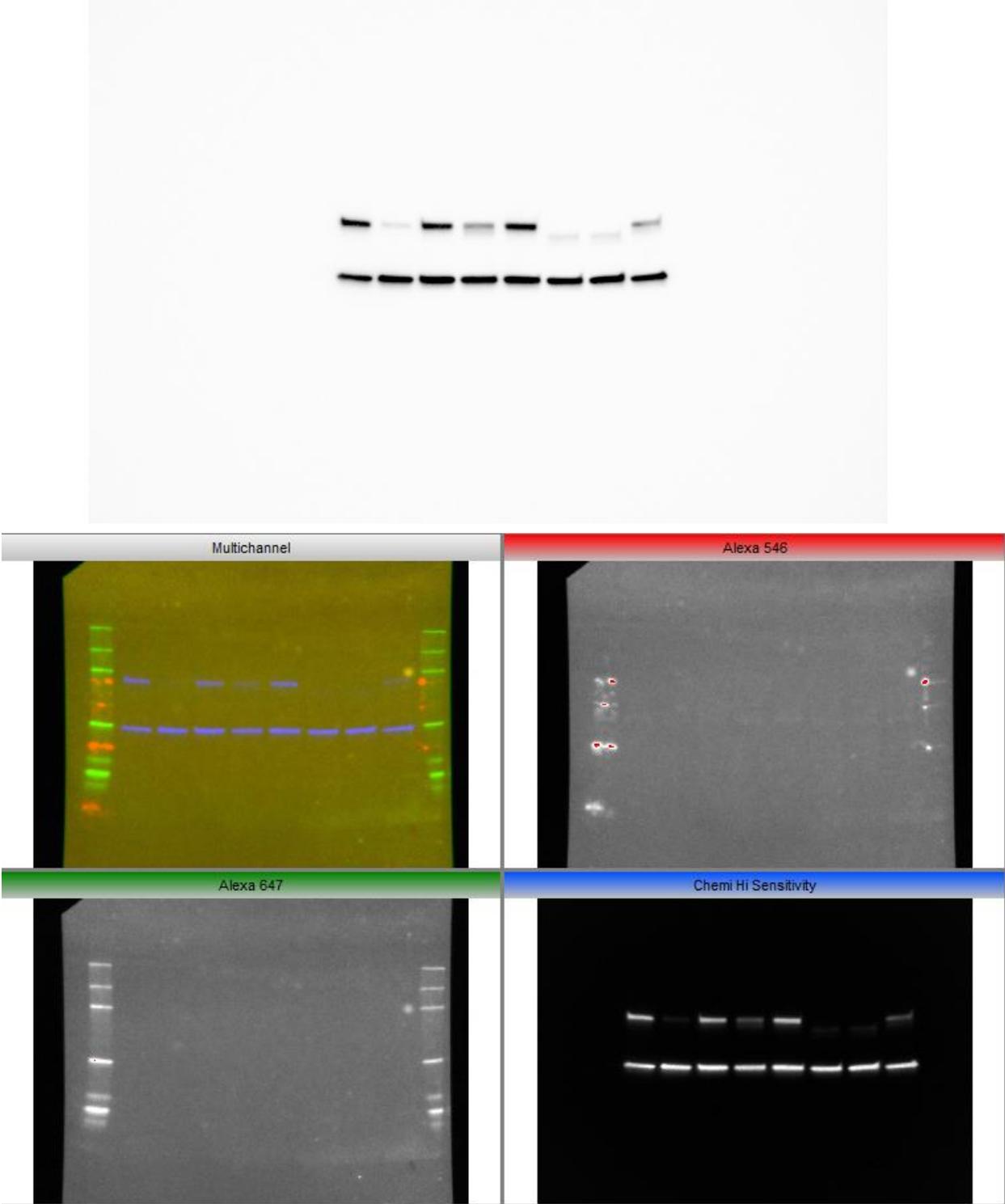


Peak#	Ret. Time	Area	Height	Area%
1	17.960	60590278	1916862	97.781
2	18.896	1375284	66713	2.219
Total		61965562	1983576	100.000

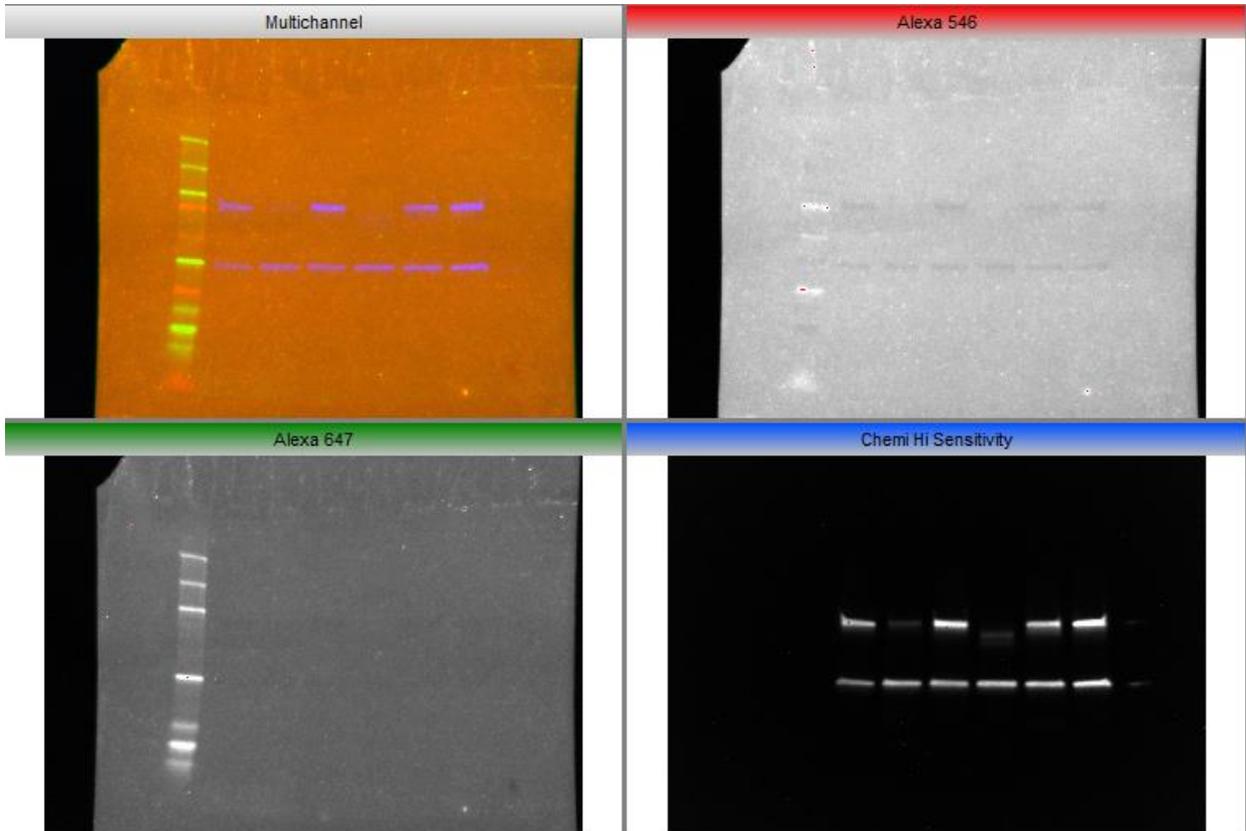


Supplementary Figure S3. Cytotoxicity of peptides in MDA-MB-231 cells at different concentrations (incubation time: 48 h; Graphs represent mean normalized values (based on No Treatment or NT group; n = 3). Error bars indicate standard deviation. ns means non-significant (p-value >0.05, ** means p-value < 0.001, and **** means p-value < 0.0001

Supplementary Figure S4. The complete (unedited) Western blot images provided in the manuscript.



A) Figure 10A



B) Figure 10B



C) Figure 10C