

Supporting information

Bi-Functional PEGylated Exenatide-Amylinomimetic Hybrids to Treat Metabolic Disorders --- An Example of Long-Acting Dual Hormonal Therapeutics

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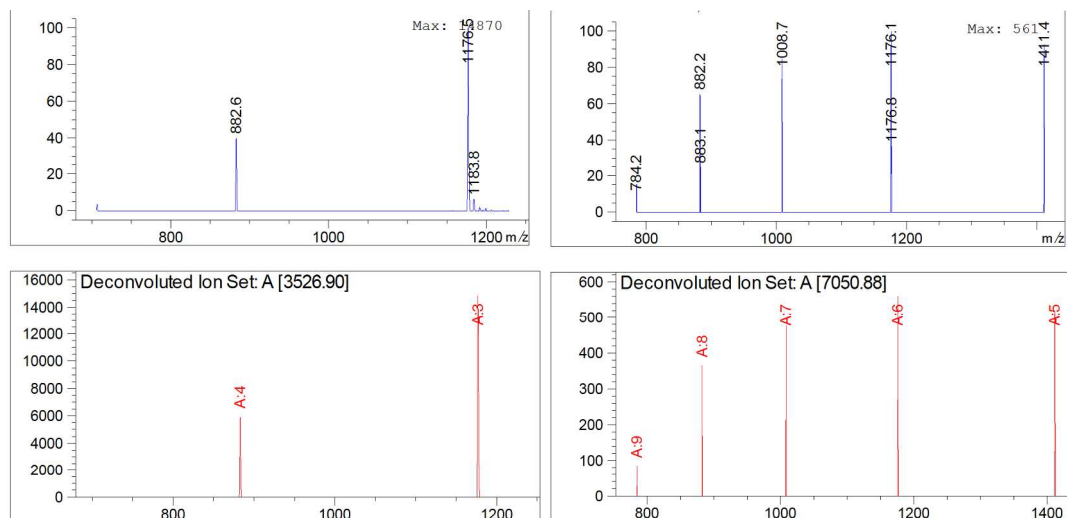
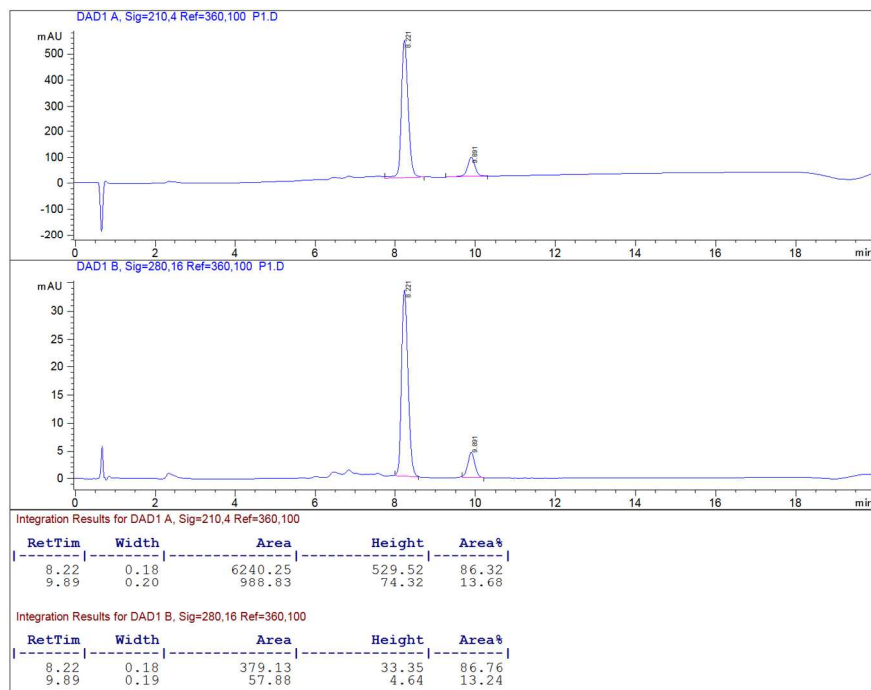
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2. MALDI-MS and SDS-PAGE gel of PEG-conjugates

1. HPLC-MS of phybrids and peptide precursors

AC3082-Lys(Cys)-NH₂

HGEGTFTSDLSKQMEEEAVRLFIEWLKNK(C)-NH₂



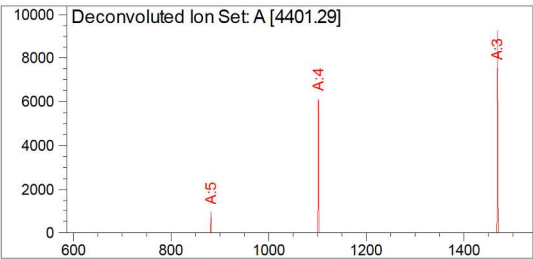
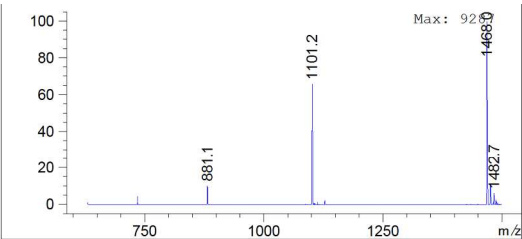
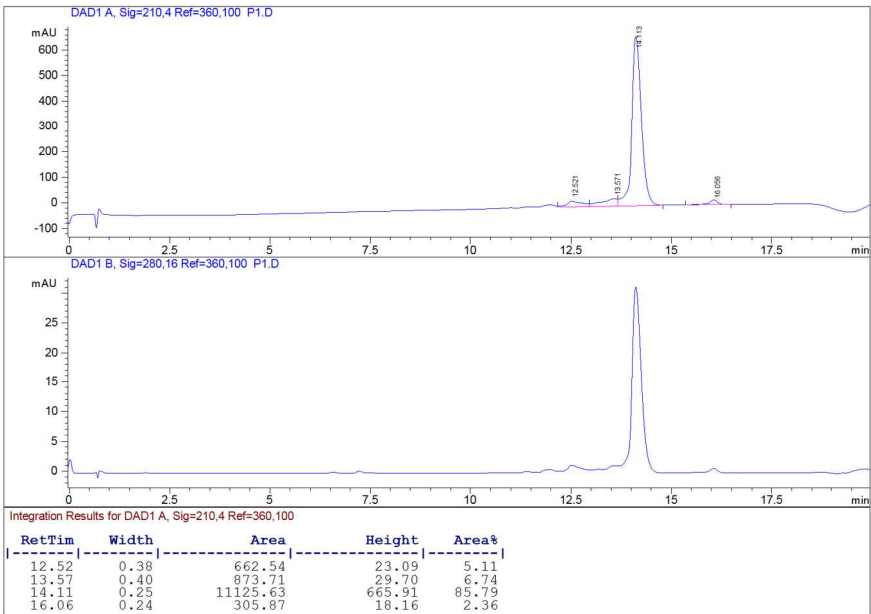
Component	Molecular Weight	Absolute Abundance	Relative Abundance	Component	Molecular Weight	Absolute Abundance	Relative Abundance
A	3526.90	20800	100.00	A	7050.88	1794	100.00

peak 1 (8.22 min)

peak 2 (9.89 min, dimer)

AC3174-Lys(Cys)-NH₂

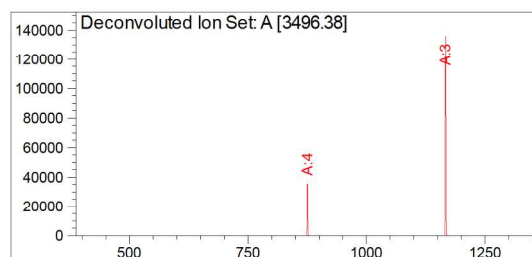
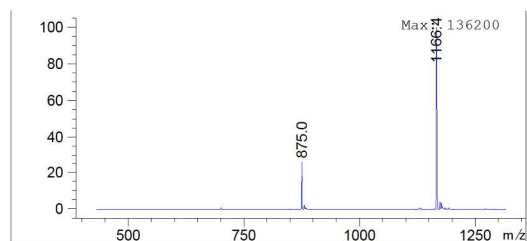
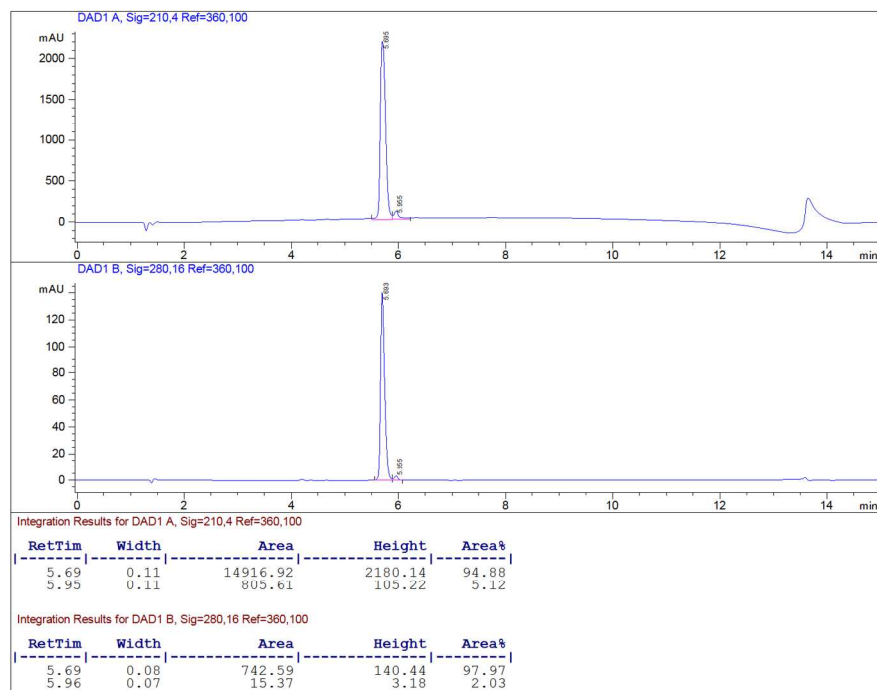
HGEGTFTSDLSKQLEEEAVRLFIEWLKN GGPSSGAPPPSK(C)-NH₂



Component	Molecular Weight	Absolute Abundance	Relative Abundance
A	4401.29	16280	100.00

desLys1-AC2307 (with di-sulfide bond)

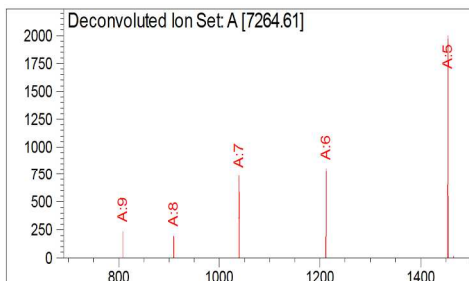
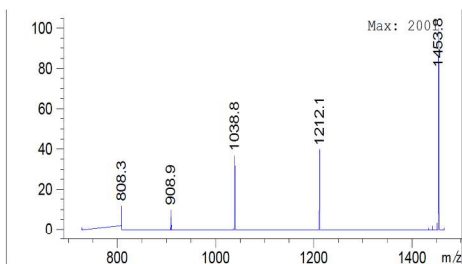
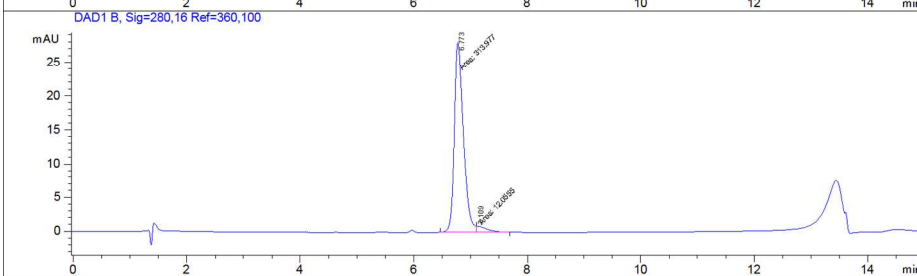
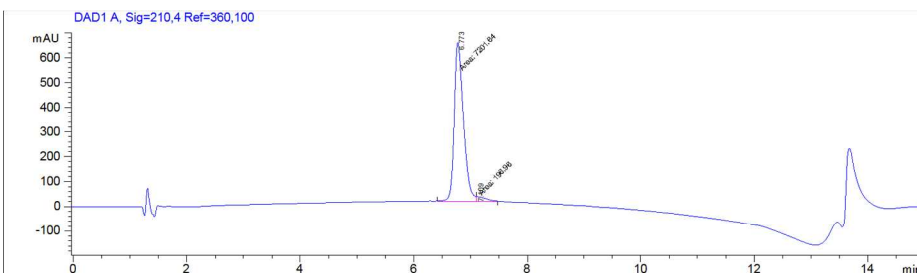
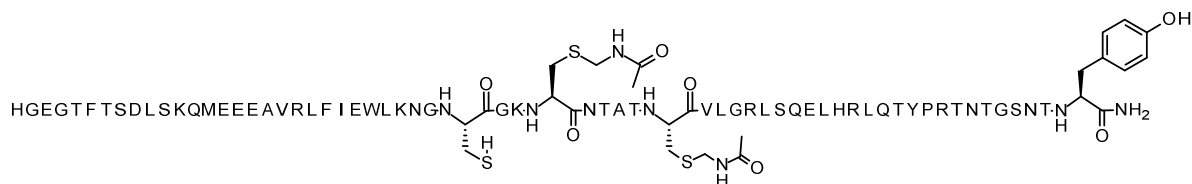
CNTATCVLGRLSQELHRLQTYPRNTGSNTY-NH₂



Component	Molecular Weight	Absolute Abundance	Relative Abundance
A	3496.38	171503	100.00

P-5 (precursor peptide for **5**)

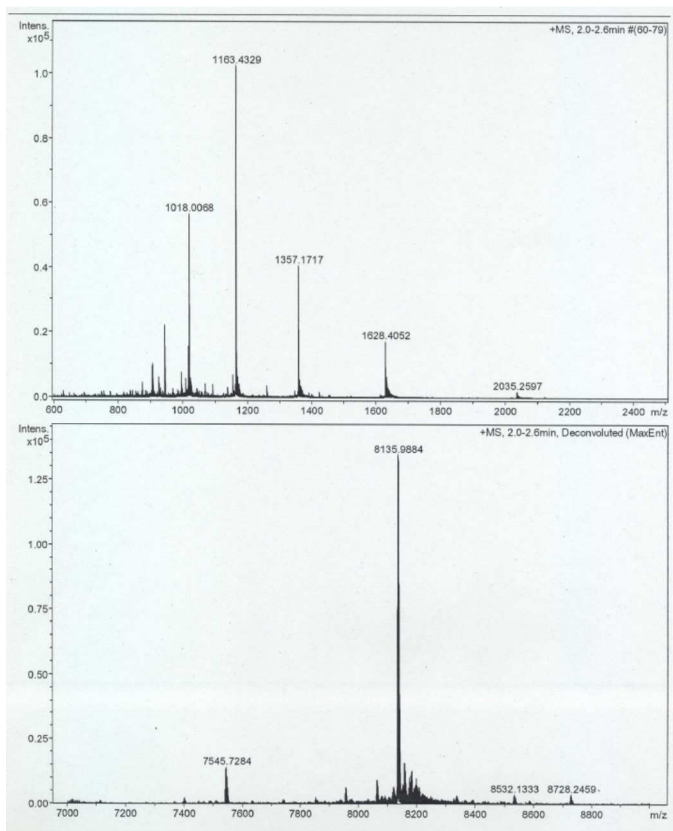
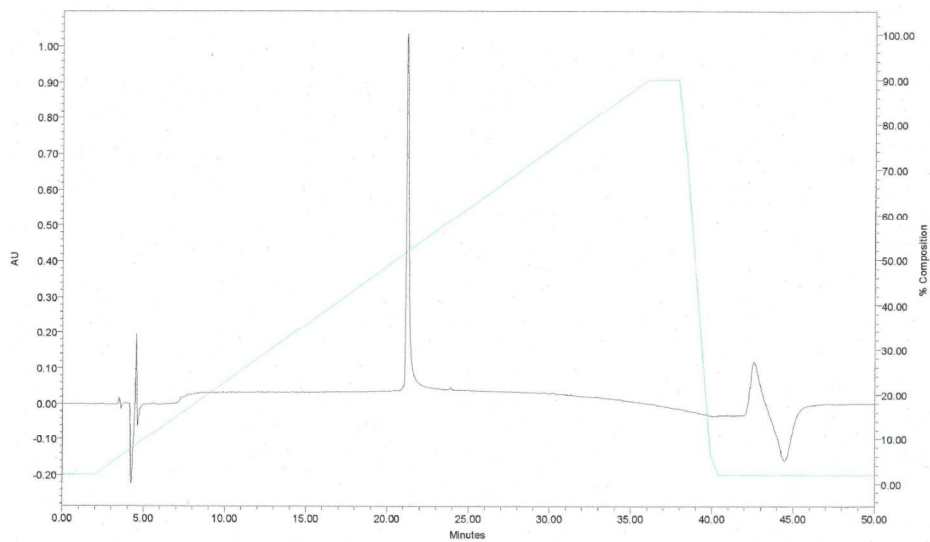
HGEGTFTSDLSKQMEEEAVRLFIEWLKNGCGKC(Acm)NTATC(Acm)VLGRLSQELHRLQTYPRNTGSNT
Y-NH₂, Acm = acetamidomethyl



Component	Molecular Weight	Absolute Abundance	Relative Abundance
A	7264.61	3851	100.00

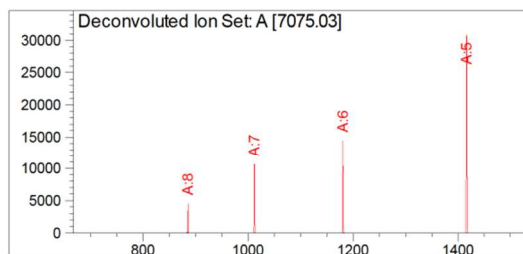
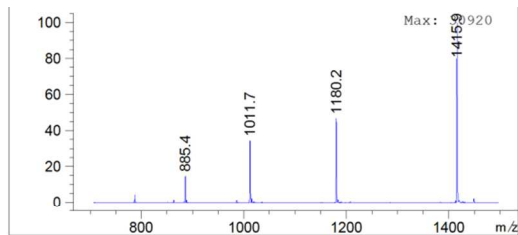
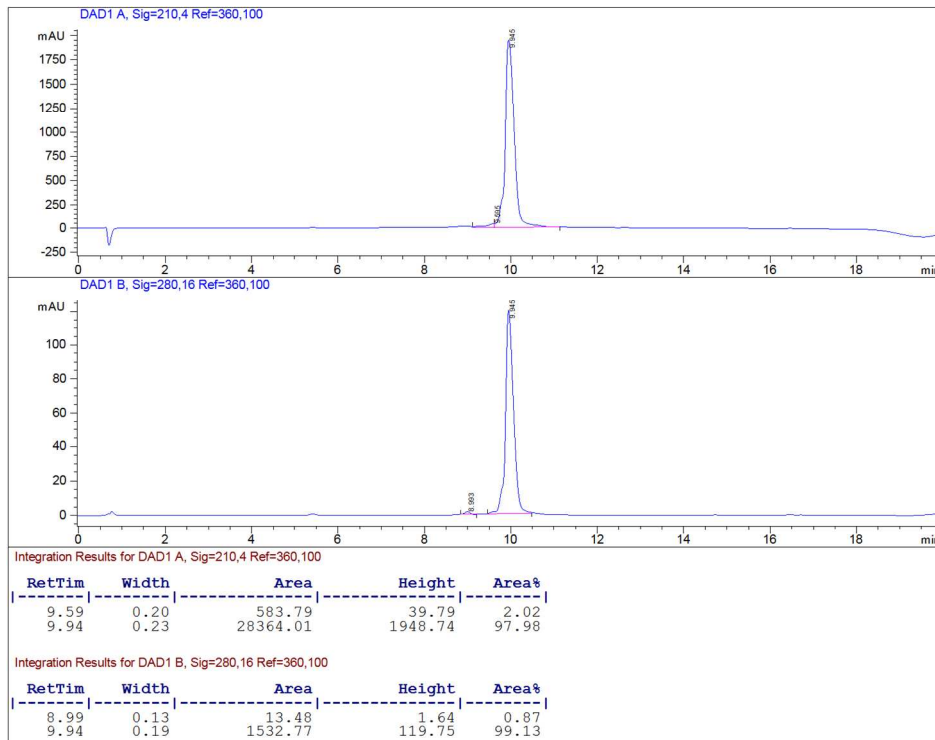
P-6 (precursor peptide for **6**)

HGEGTFTSDLSKQLEEEAVRLFIEWLKNGGPSSGAPPPSGCGKC(Acm)NTATC(Acm)VLGRLSQELHRLQT
YPRNTGSNTY-NH₂



Phybrid 1

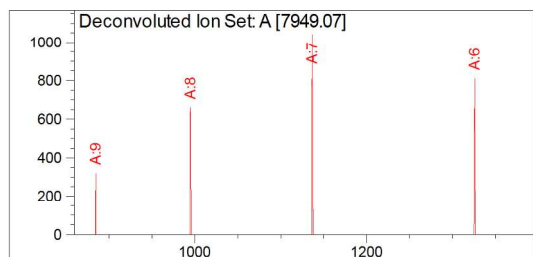
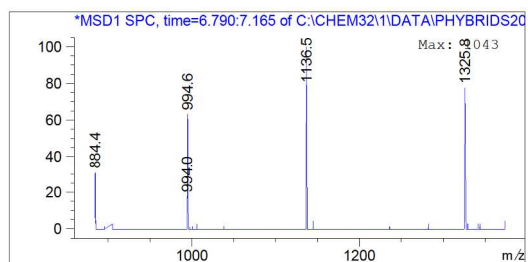
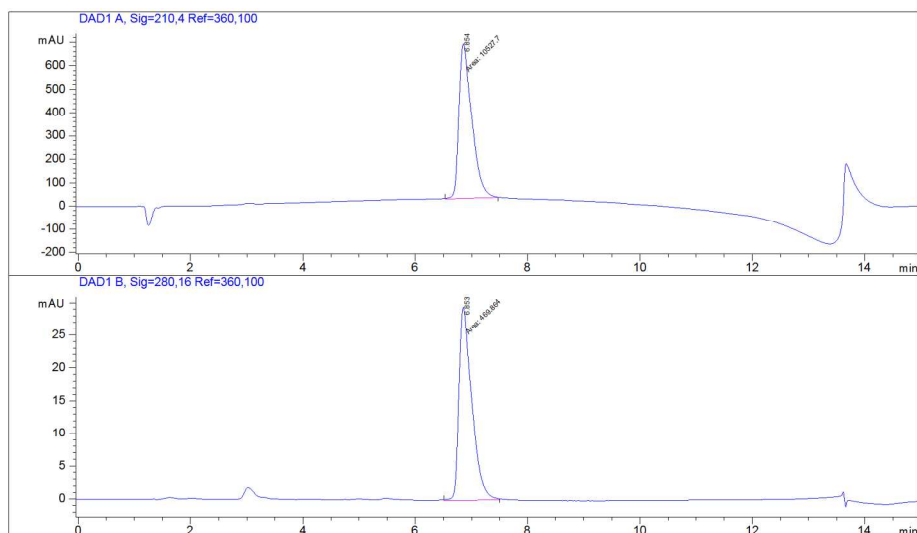
HGEGTFTSDLSKQMEEEAVRLFIEWLKNGGGK~~ENTAT~~CVLGRLSQELHRLQTYPRNTGSNTY-NH₂



Component	Molecular Weight	Absolute Abundance	Relative Abundance
A	7075.03	60457	100.00

Phybrid 2

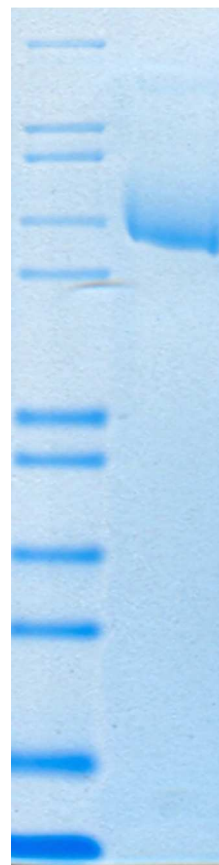
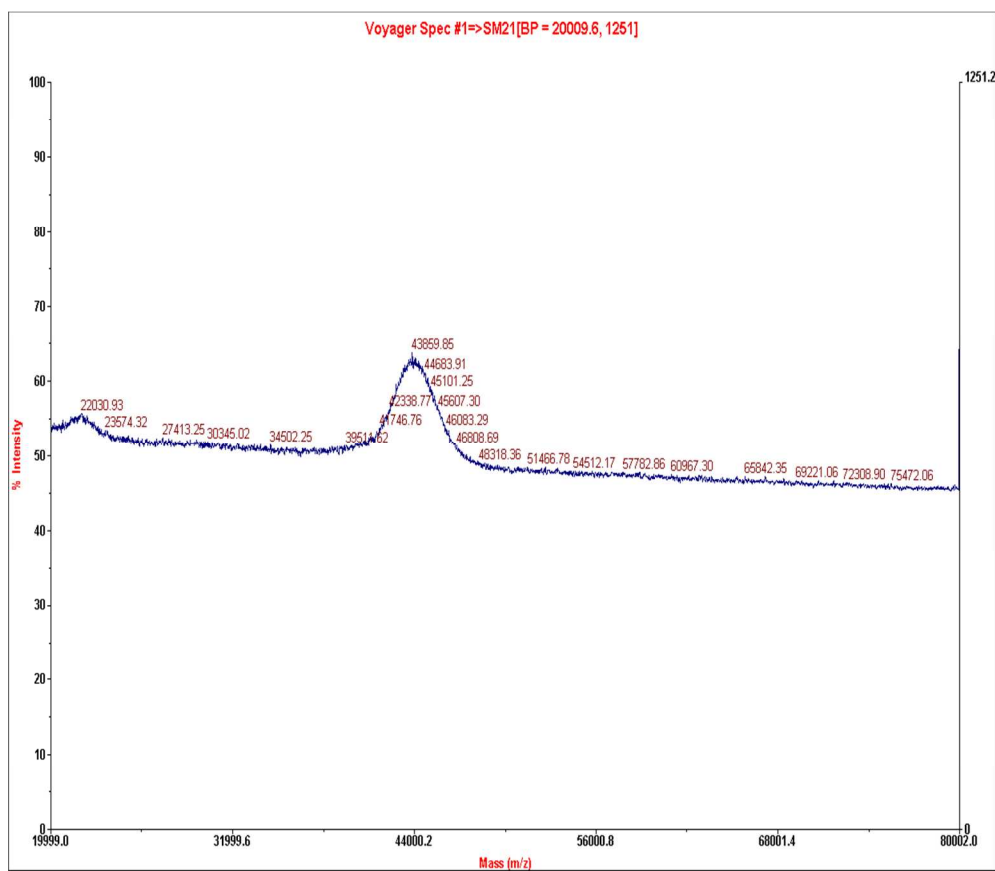
HGEGTFTSDLSKQLEEEAVRLFIEWLKNGGPSSGAPPPSGGGK~~ENTAT~~CVLGRLSQELHRLQTYPRNTGSEN
 NTY-NH₂



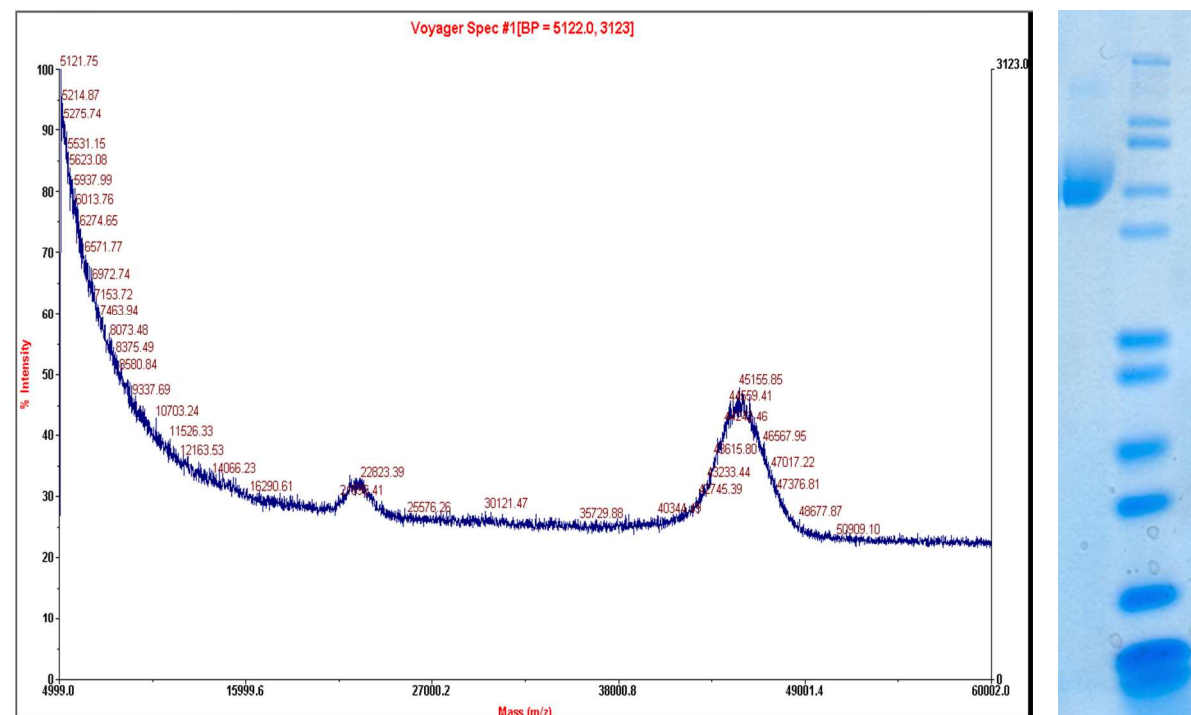
Component	Molecular Weight	Absolute Abundance	Relative Abundance
A	7949.07	2664	100.00

2. MALDI-MS and SDS-PAGE gel of PEG-conjugates

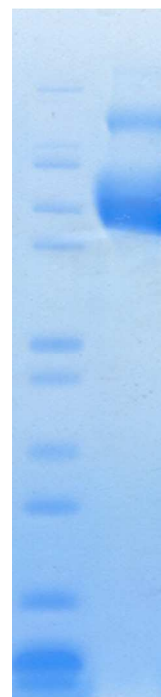
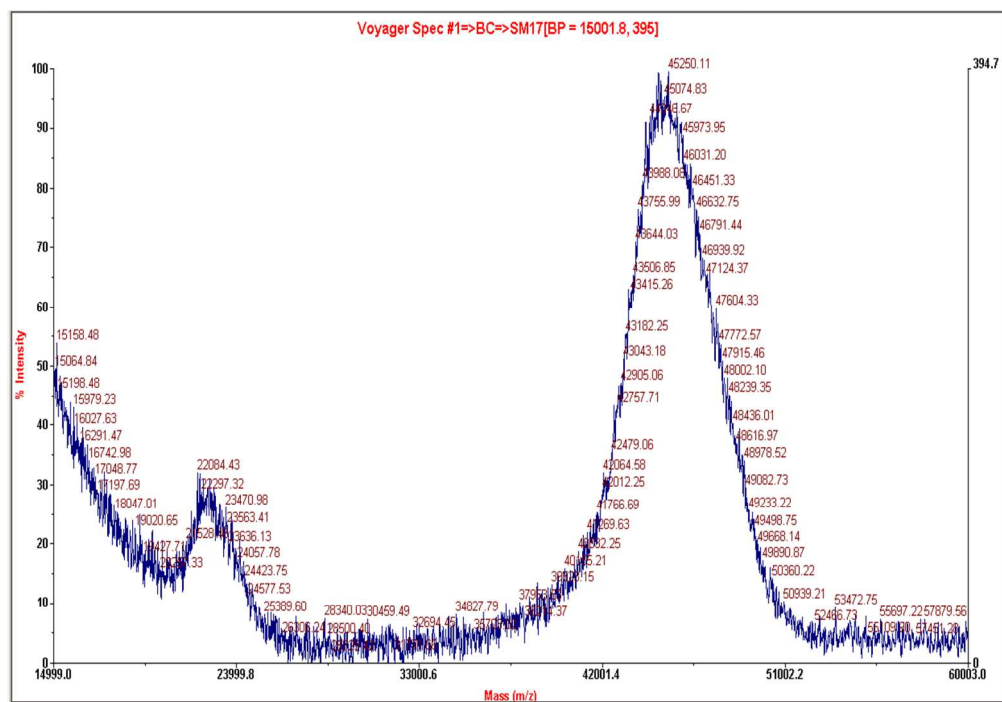
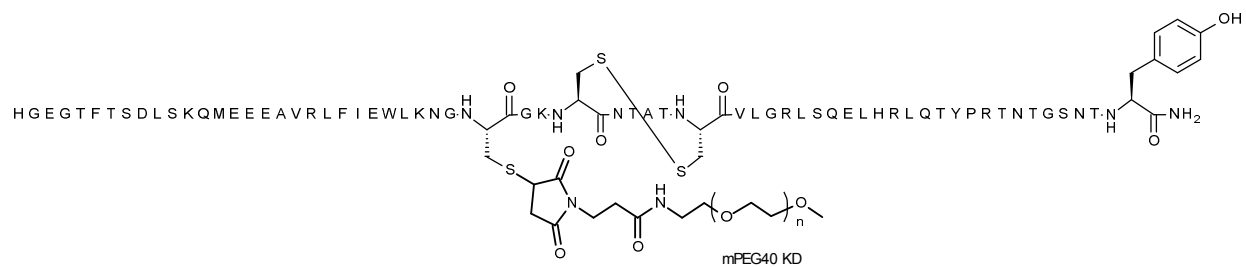
Compound 3



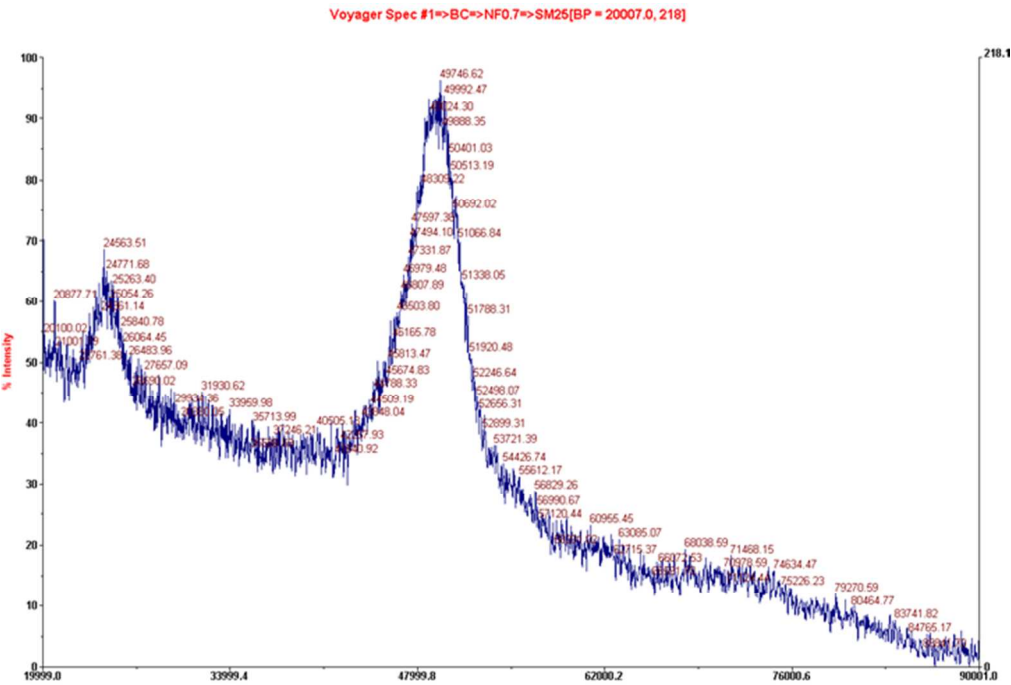
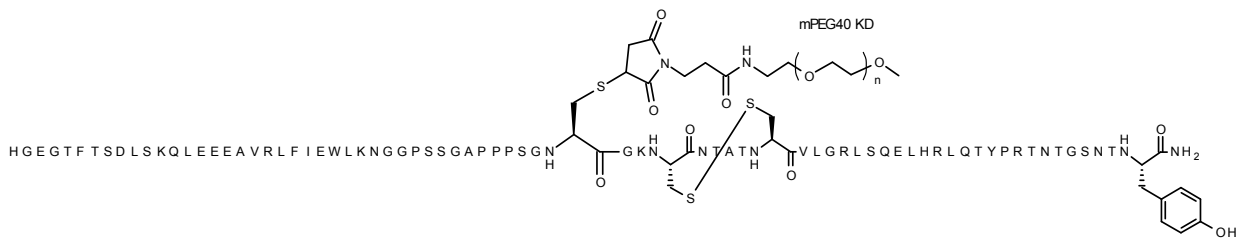
S10



Compound 5



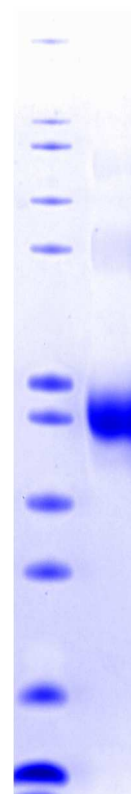
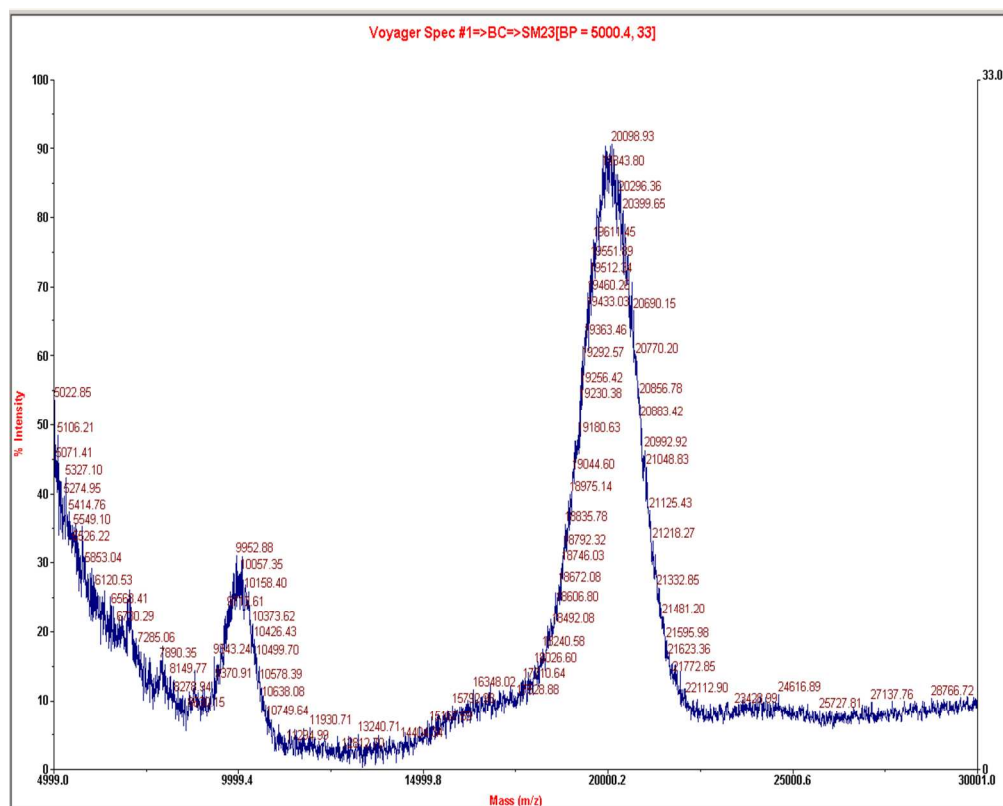
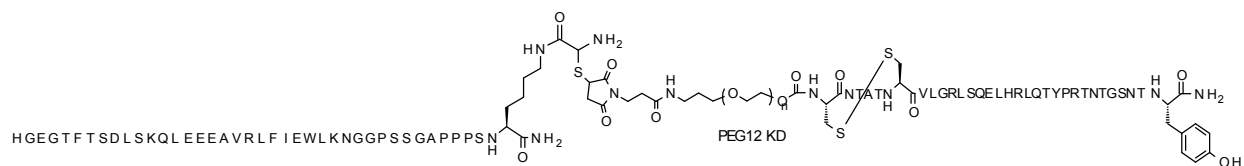
Compound 6



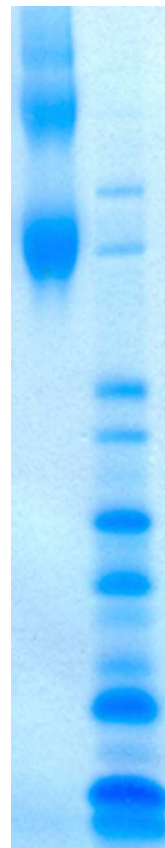
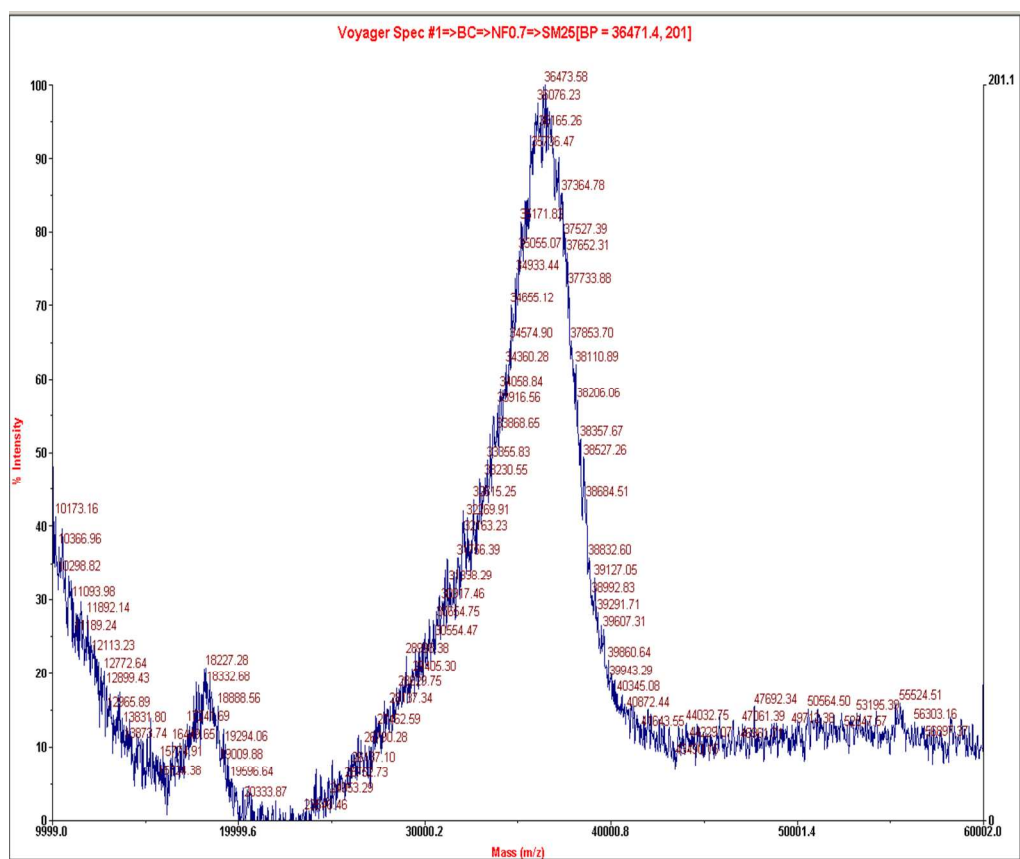
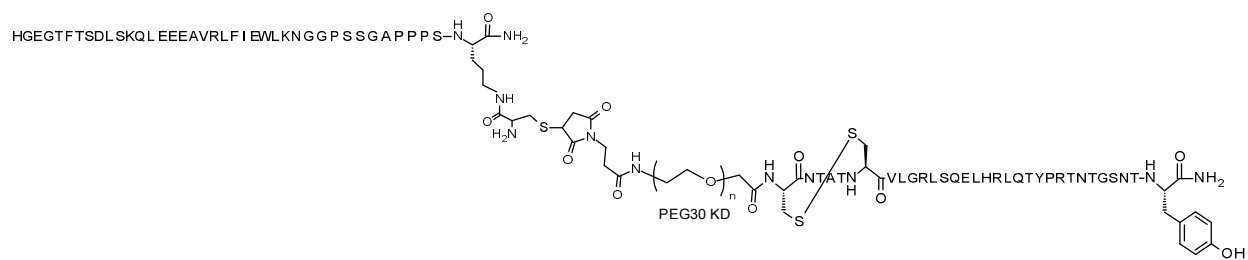
S13



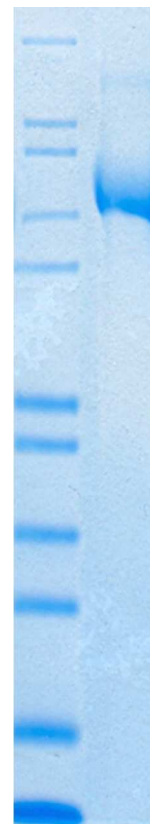
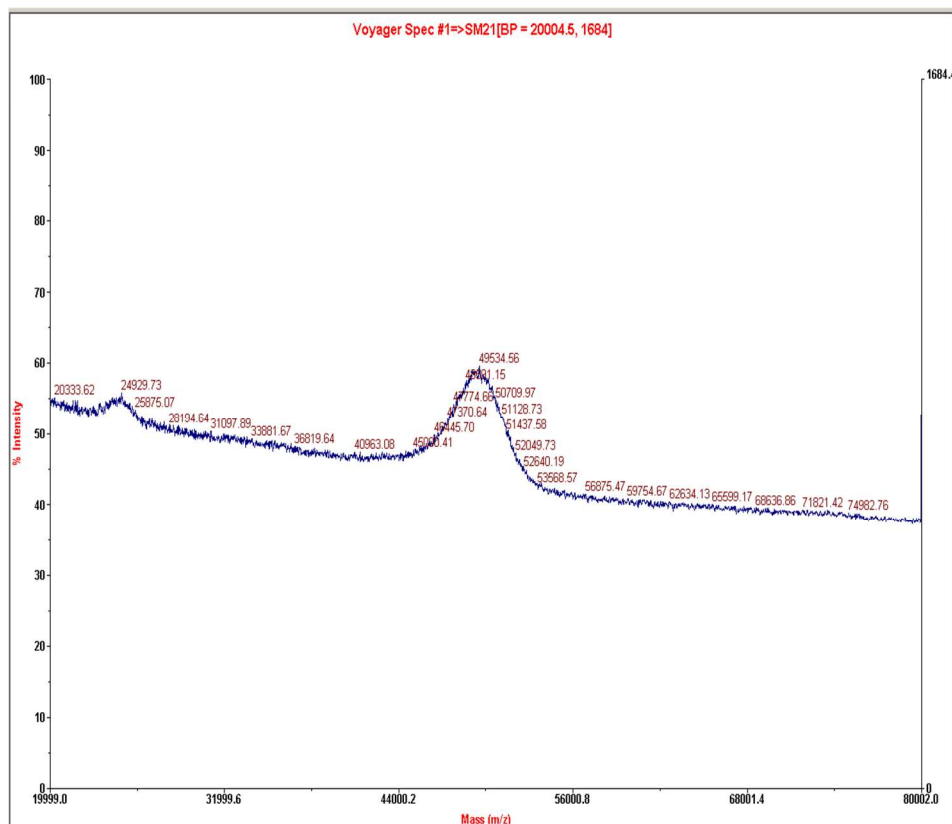
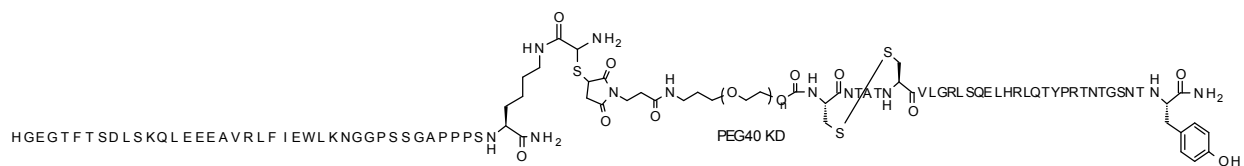
Compound 8



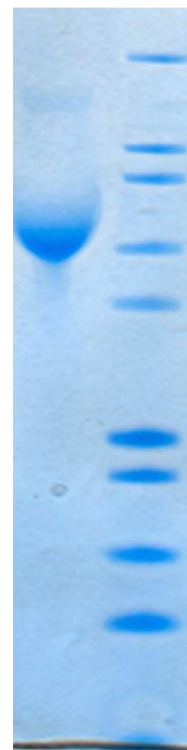
Compound 9



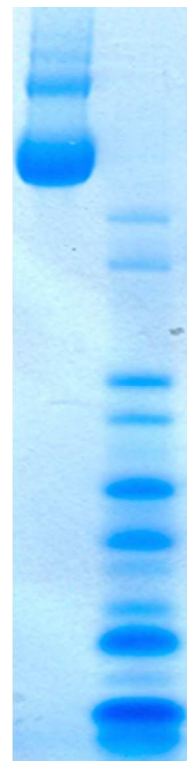
Compound 10



S17



S18



S19

