

Supporting Information

Convergent synthesis of hydrophilic monomethyl dolastatin 10 based drug linkers for antibody drug conjugation

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110816_OT_MP-PEG4-DOL10
T: FTMS + p ESI Full ms [150.00-2000.00]

1 RT: 0.02 AV: 1 NL: 9.99E5

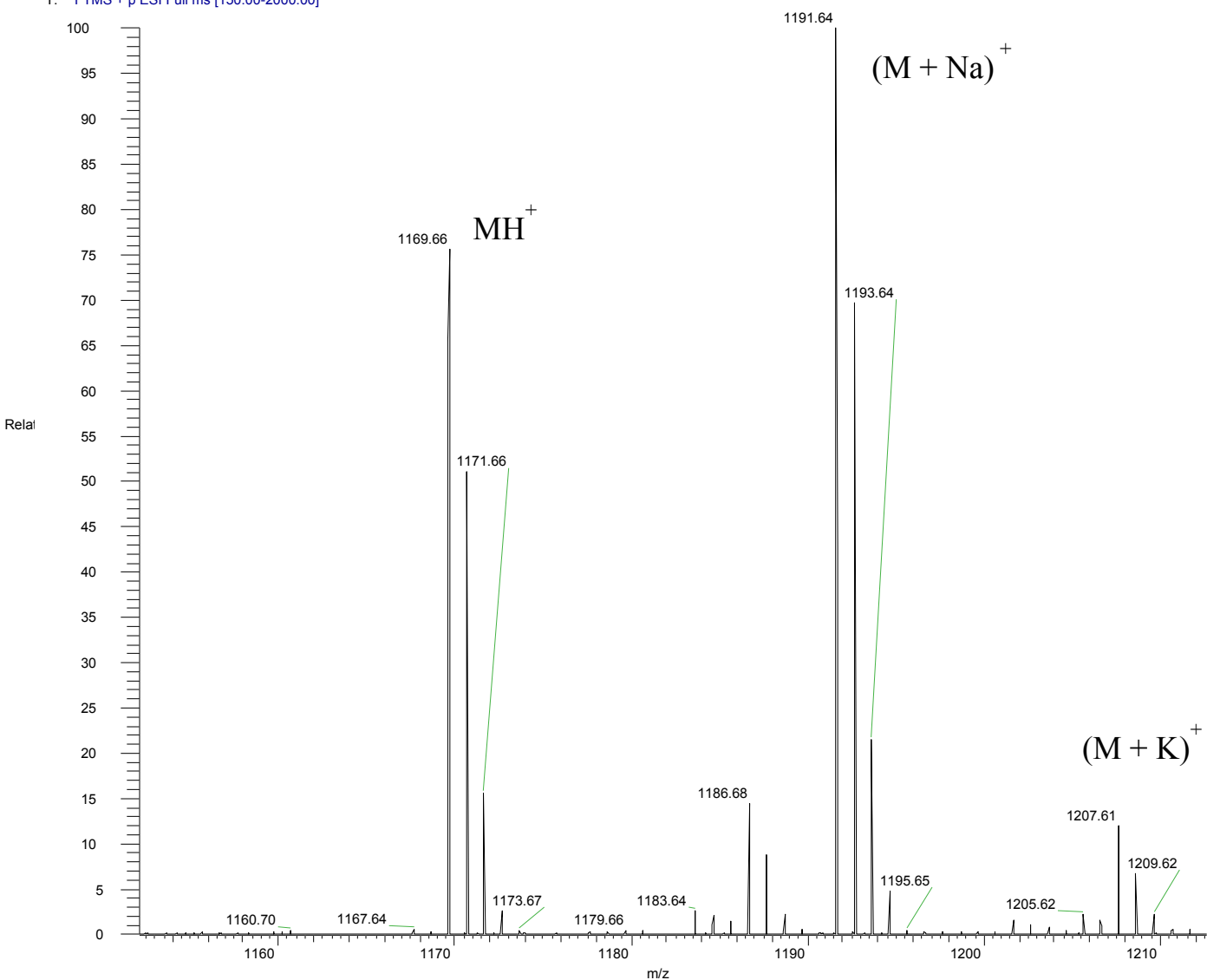


Figure S1. ESI mass spectrum of maleimido propyl (PEG)₄ dolastatin 10 drug linker with theoretical m/z of $MH^+ = 1169.65$ (please note that in addition to protonated molecular ion peak, both sodium and potassium ion complexed molecular ions peaks were observed.).

110816_OT_MP-PEG6-DOL10
T: FTMS + p ESI Full ms [150.00-2000.00]

1 RT: 0.01 AV: 1 NL: 1.25E6

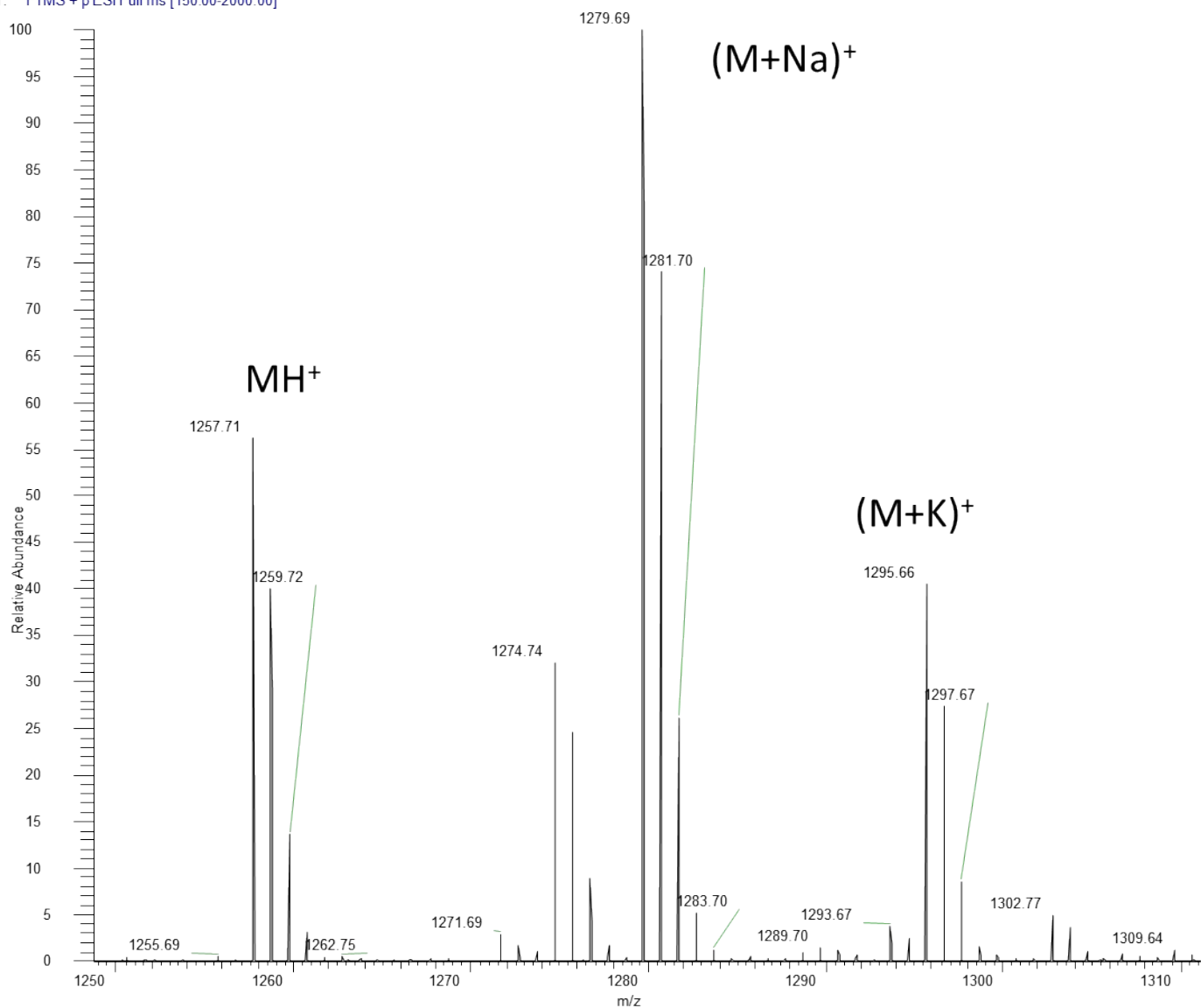


Figure S2. ESI mass spectrum of maleimido propyl (PEG)₆ dolastatin 10 drug linker with theoretical m/z of MH⁺ = 1257.70 (please note that in addition to protonated molecular ion peak, both sodium and potassium ion complexed molecular ions peaks were observed.).

190220_MP-PEG8-DOL10#1-38 RT: 0.00-0.99 AV: 38 NL: 2.00E7
T: FTMS + p ESI Full ms [150.00-2000.00]

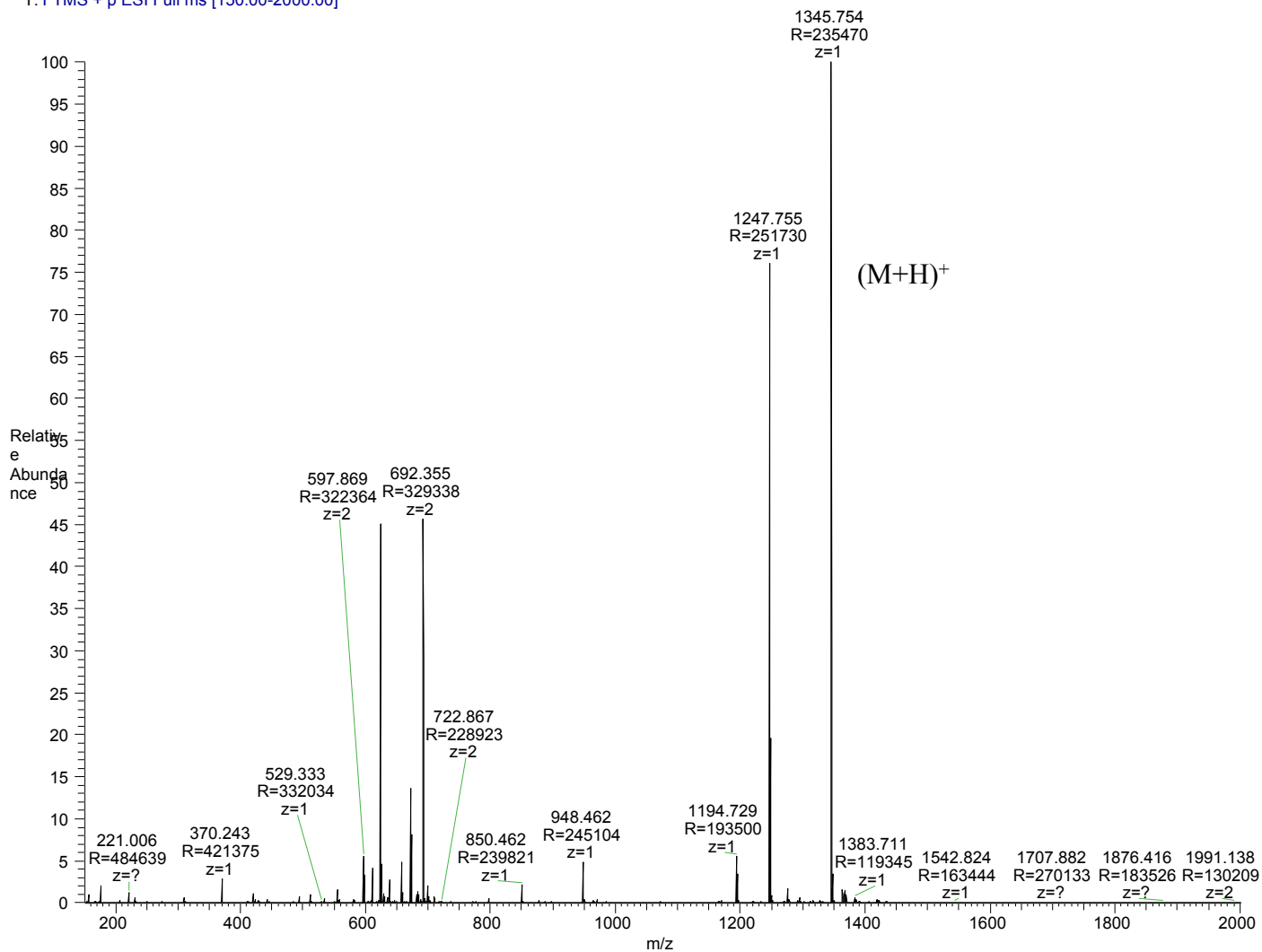


Figure S3. ESI mass spectrum of maleimido propyl (PEG)₈ dolastatin 10 drug linker (theoretical m/z of MH⁺ = 1345.75 Dalton)

110816_OT_MP-PEG12-DOL10

1 RT: 0.02 AV: 1 NL: 3.94E5

T: FTMS + p ESI Full ms [200.00-2200.00]

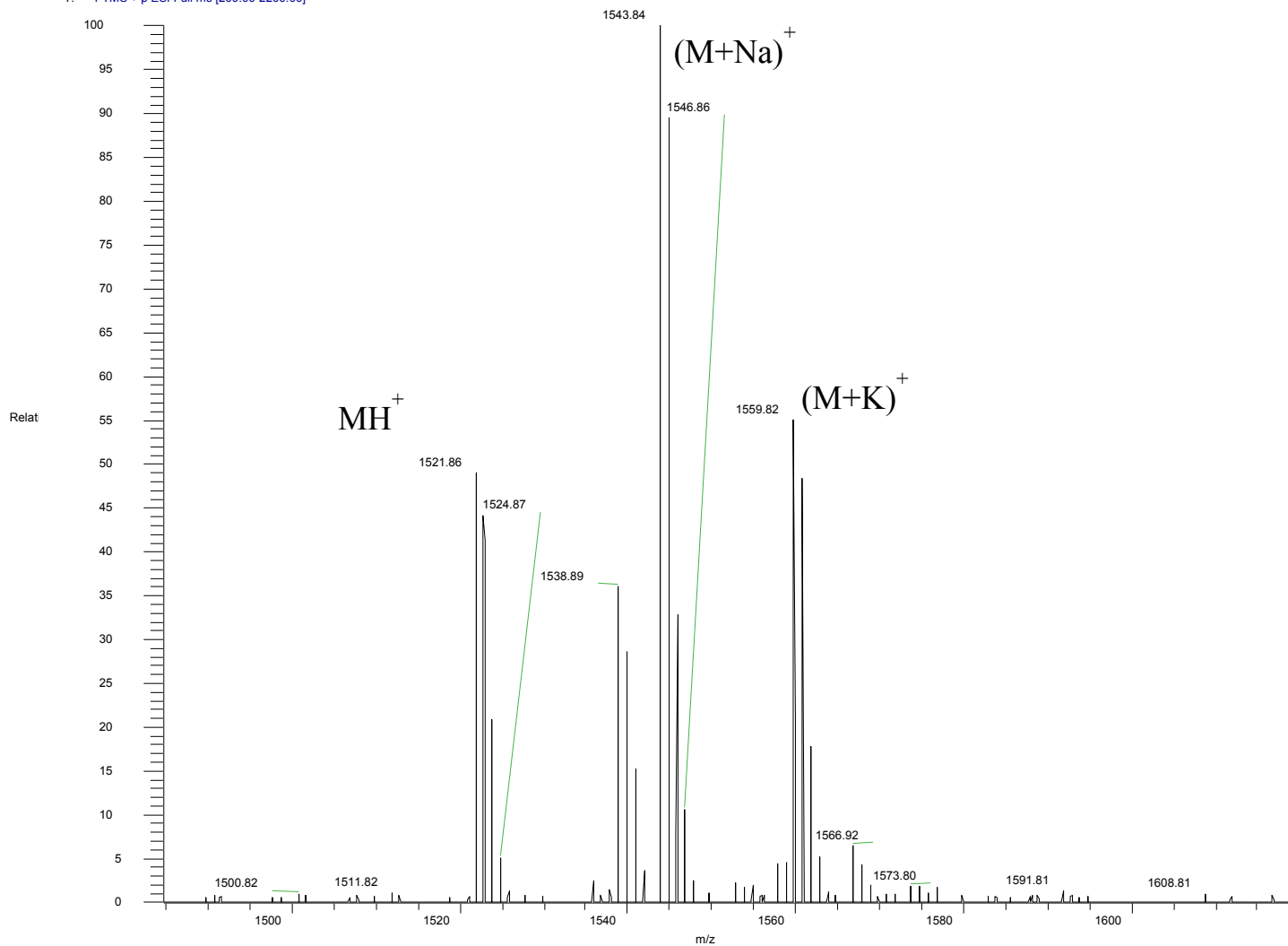


Figure S4. ESI mass spectrum of maleimido propyl (PEG)₁₂ dolastatin 10 drug linker with theoretical m/z of $MH^+ = 1521.86$ (please note that in addition to protonated molecular ion peak, both sodium and potassium ion complexed molecular ions peaks were observed.).

110816_OT_MC-PEG24-DOL10 #1-92 RT: 0.02-2.49 AV: 92 NL: 3.60E4
T: FTMS + p ESI Full ms [200.00-2200.00]

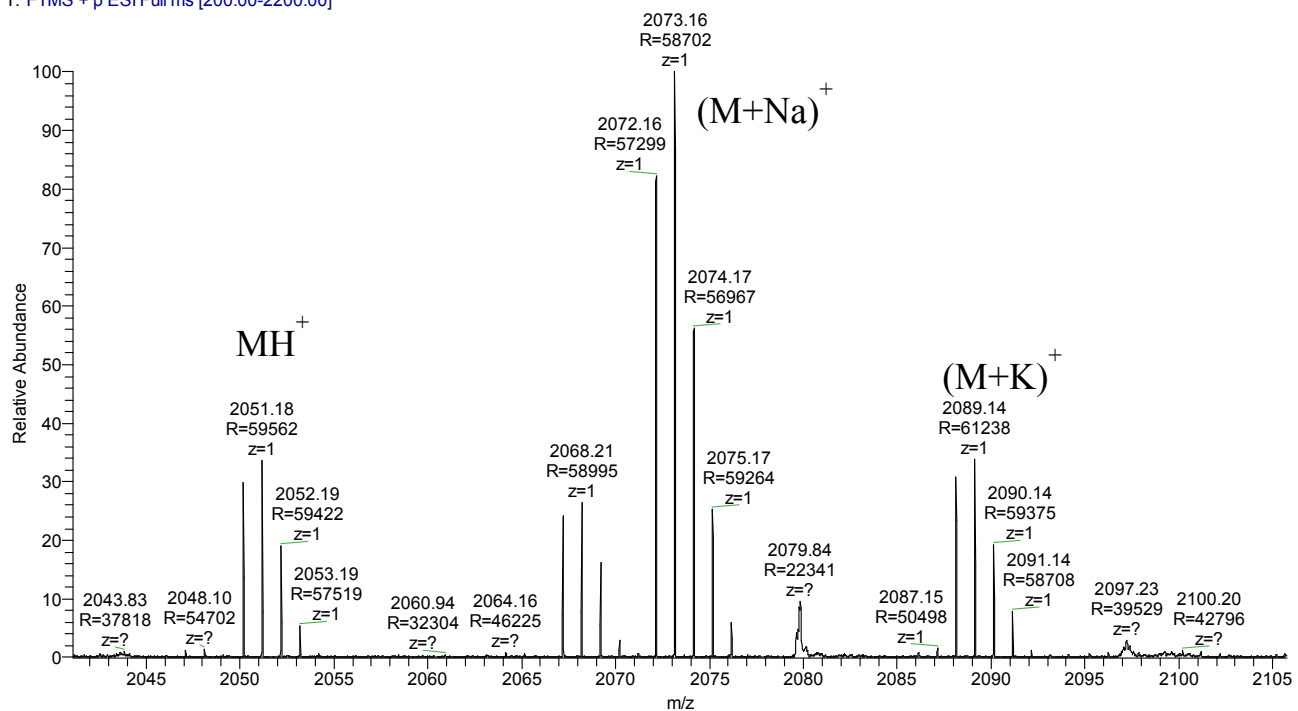
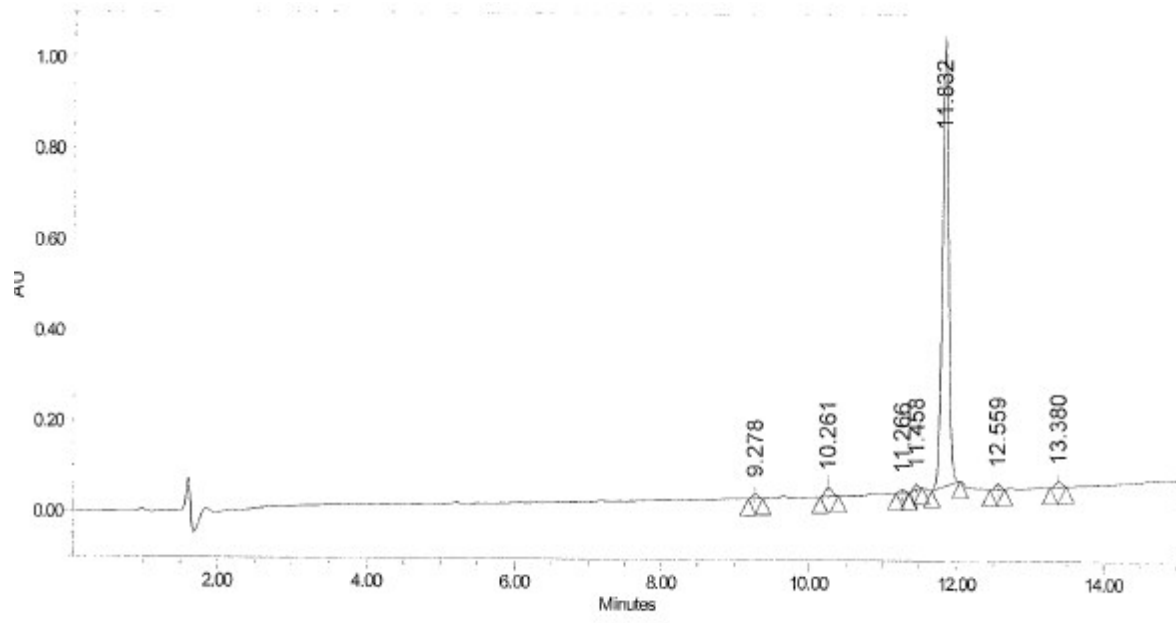


Figure S5. ESI mass spectrum of maleimido propyl (PEG)₂₄ dolastatin 10 drug linker with theoretical m/z of MH⁺ = 2050.18 (please note that in addition to protonated molecular ion peak, both sodium and potassium ion complexed molecular ions peaks were observed.).



Peak Results

Name	RT	Area	Height	Amount	Units	% Area
1	9.278	57302	10720			0.91
2	10.261	132104	20282			2.10
3	11.266	30717	6417			0.49
4	11.458	52297	10849			0.83
5	11.832	5878363	975685			93.60
6	12.559	61799	11831			0.98
7	13.380	67532	12101			1.08

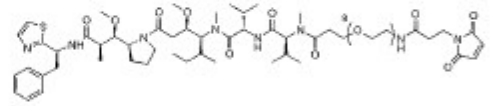


Figure S6. HPLC trace of PEG8 Do110 drug linker.