

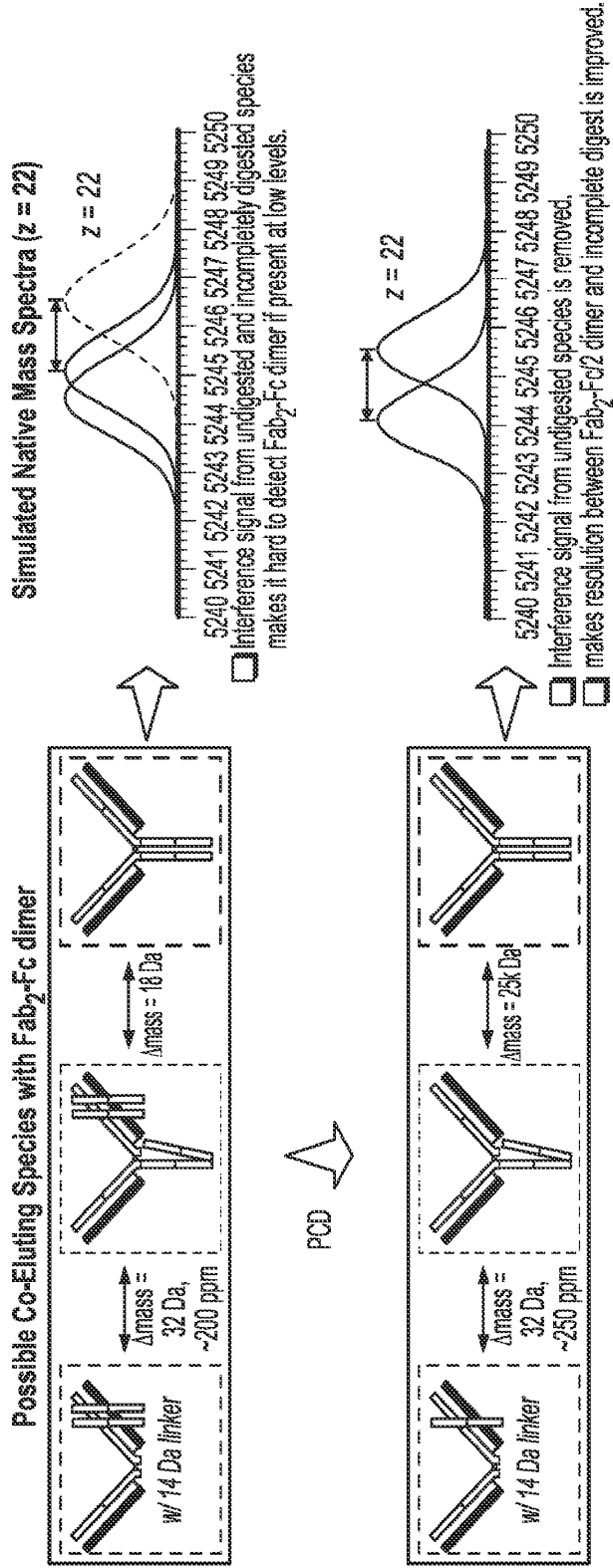


FIG. 1

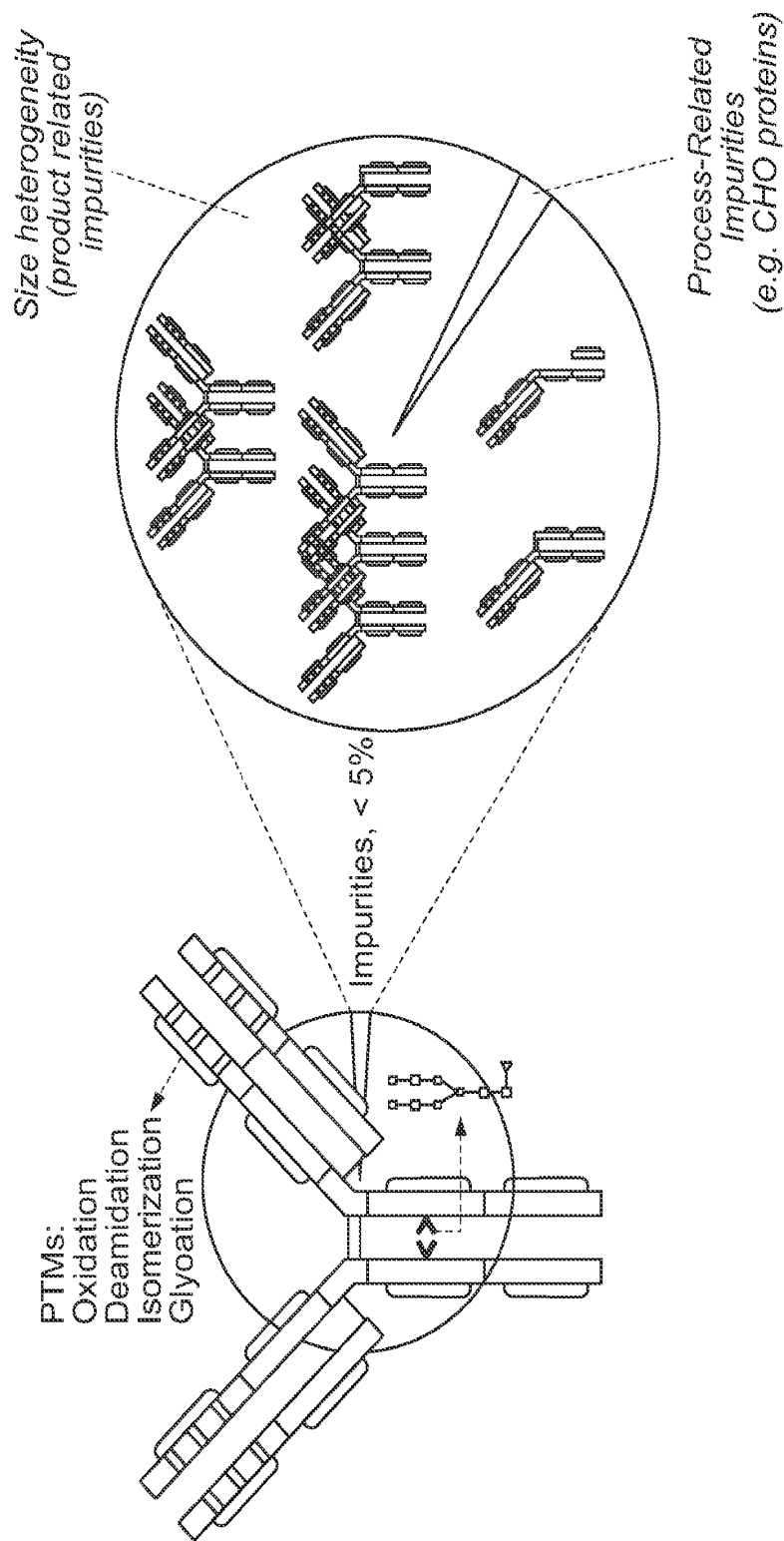


FIG. 2

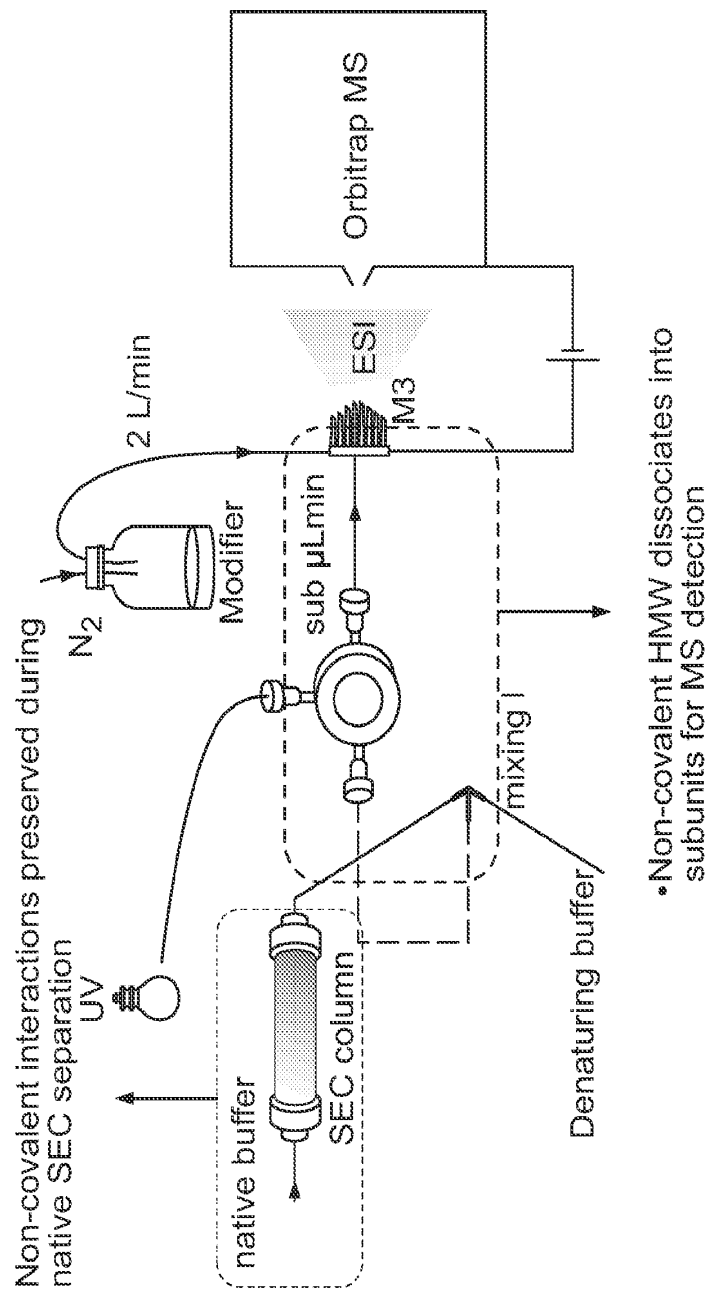


FIG. 3

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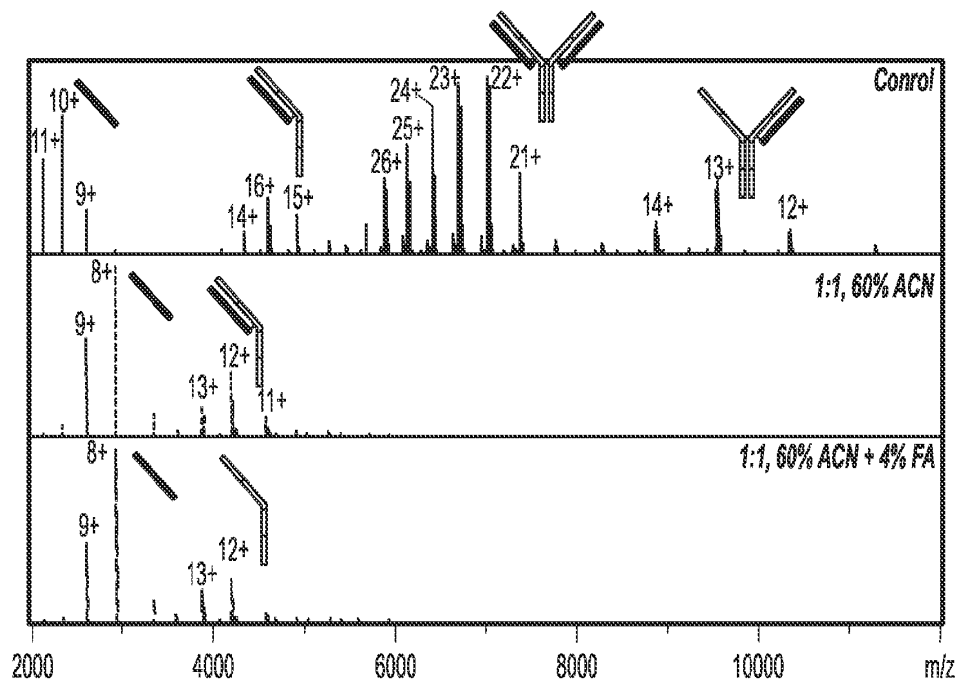


FIG. 4A

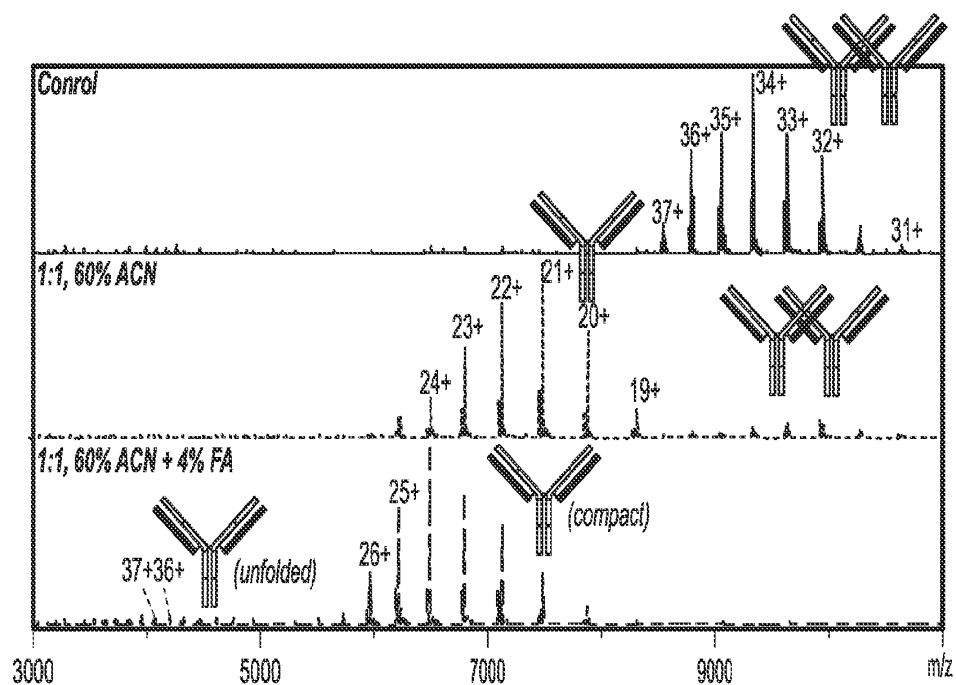


FIG. 4B

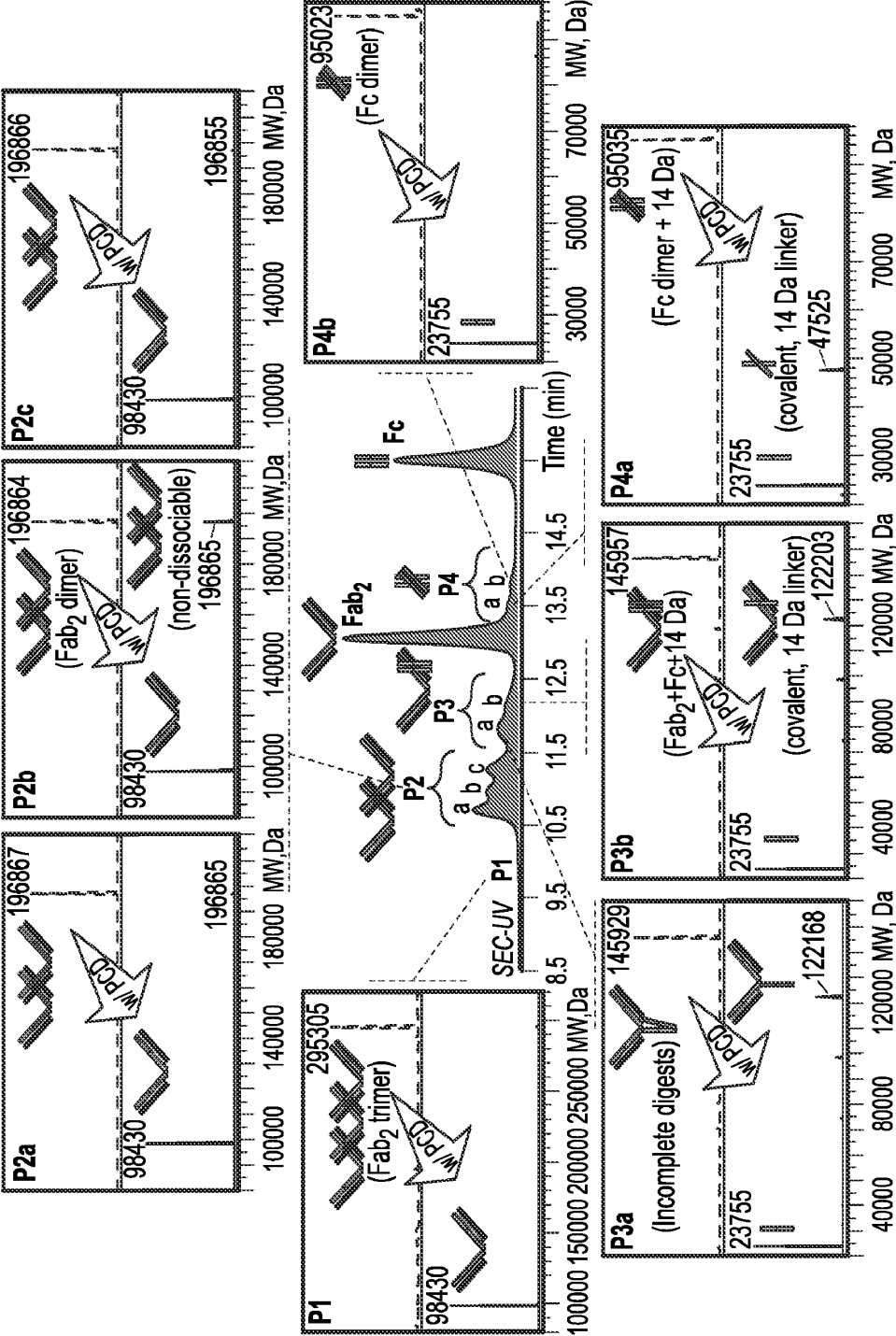


FIG. 5

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HMW peaks from SEC-UV	Proposed size variant identity	nSEC-MS analysis without PCD		nSEC-MS analysis with PCD		
		Observed intact mass (Da)	Theoretical intact mass (Da)	Dissociated subunits or non-dissociated complex	Observed mass (Da)	Theoretical mass (Da)
P1	 Fab ₂ trimer, non-covalent	295,305	295,299	 Fab ₂ monomer	98,430	98,433
P2a	 Fab ₂ dimer, non-covalent	196,867	196,866	 Fab ₂ monomer	98,430	98,433
P2b	 Fab ₂ dimer, non-dissociable	196,864	NA	 Fab ₂ dimer, non-dissociated	196,856	NA
P2c	 Fab ₂ dimer, non-covalent	196,866	196,866	 Fab ₂ monomer	98,430	98,433
P3a	 Incomplete FabRICATOR digest of mAb3	145,929	145,924	 Fc/2	23,755	23,755
				 [mAb3 monomer - Fc/2]	122,168	122,169
P3b	 Fab ₂ -Fc dimer, covalent w/ 14Da linker	145,957	145,956	 Fc/2	23,755	23,755
				 [Fab ₂ -Fc/2] + 14Da linker	122,203	122,201
P4a	 Fc dimer, covalent w/ 14Da linker	95,035	95,032	 Fc/2	23,755	23,755
				 Fc/2 dimer + 14 Da linker	47,525	47,523
P4b	 Fc dimer, non-covalent	95,023	95,018	 Fc/2	23,755	23,755

FIG. 6

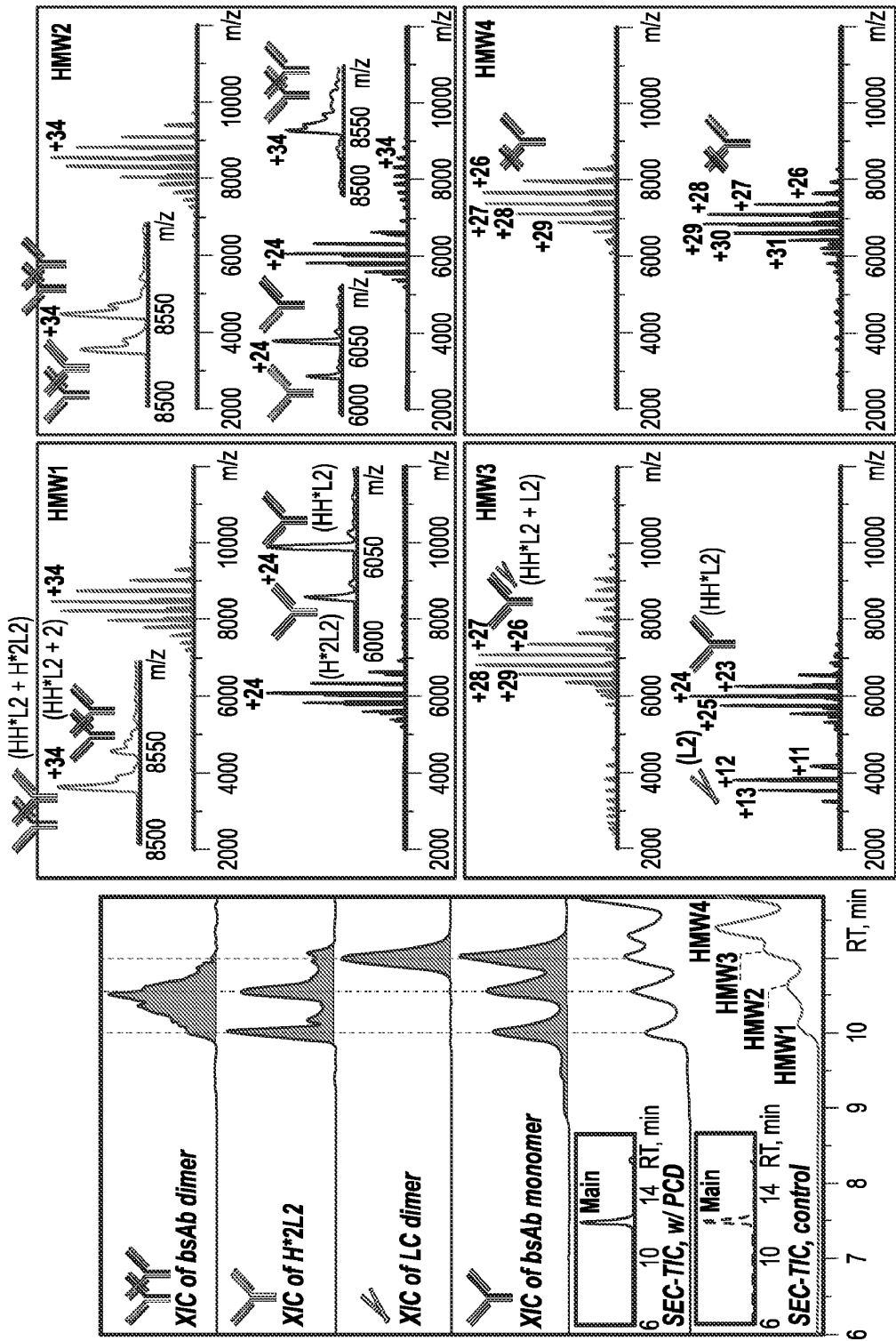


FIG. 7

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HMW peaks from SEC-TIC	Proposed size variant identity	nSEC-MS analysis without PCD		nSEC-MS analysis with PCD		
		Observed intact mass (Da)	Theoretical intact mass w/o linker (Da)	Dissociated subunits or non-dissociated complex	Observed mass (Da)	Theoretical mass w/o linker (Da)
HMW1	 bsAb homodimer (HH*L2)	290,696	290,674	 bsAb	145,333	145,337
	 heterodimer (HH*L2 + H*2L2)	290,030	290,014	 H*2L2	144,673	144,676
HMW2	 bsAb homodimer	290,684	290,674	 bsAb	145,333	145,337
				 H*2L2	144,673	144,676
	 heterodimer	290,032	290,014	 bsAb homodimer	290,683	290,674
HMW3	 bsAb + 2*LC	191,845	191,842	 bsAb	145,332	145,337
				 LC dimer	46,506	46,505
HMW4	 bsAb + Fab fragment	198,358	198,347	 bsAb + Fab fragment	198,357	198,347

FIG. 8

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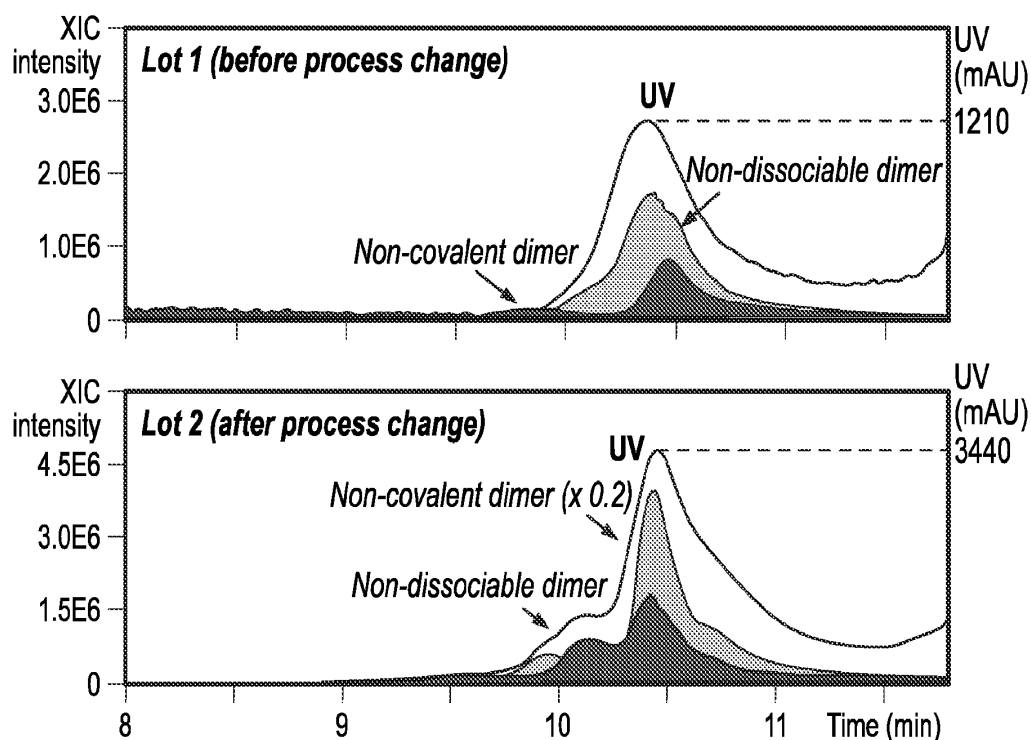


FIG. 9A

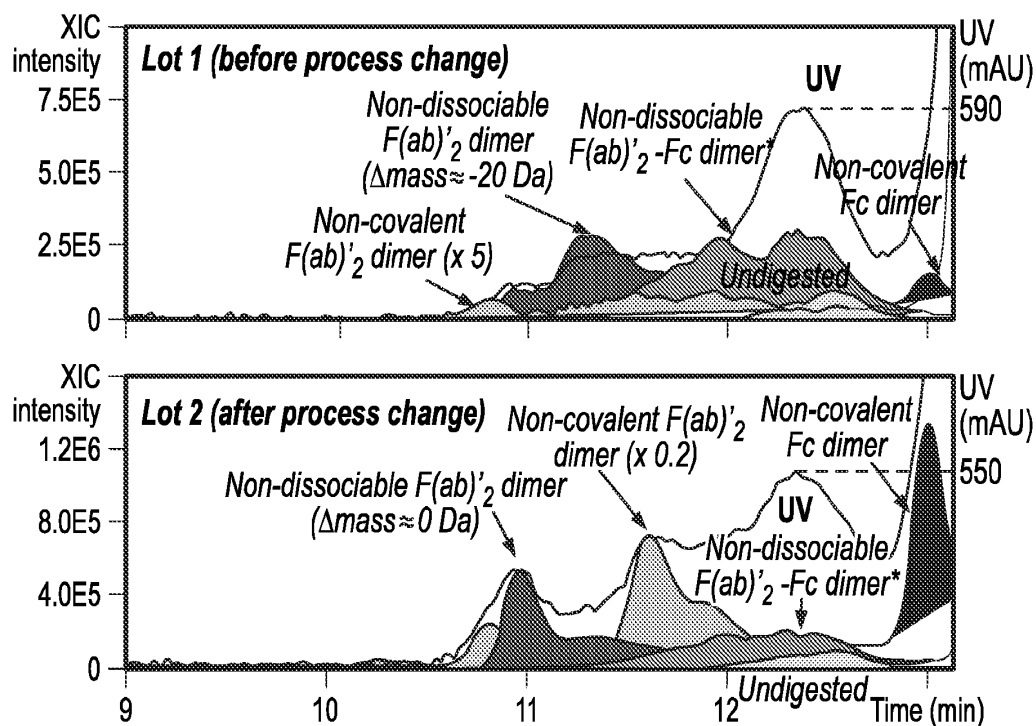


FIG. 9B

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Non-dissociable species detected in mAb4		Species detected under PCD conditions	Observed mass after PCD (Da)		Theoretical mass w/o linker (Da)
			Lot 1	Lot 2	
Analysis at intact level	Dimer	 Earlier-eluting peak	293,799	293,823	293,798 ^a
		 Later-eluting peak	293,793	293,811	
Analysis at sub-domain level (IdeS digested)	F(ab) ₂ dimer	 Earlier-eluting peak	198,783	198,795	198,784 ^b
		 Later-eluting peak	198,768	198,776	
	Incomplete IdeS digest of mAb4	 Fc/2	23,771	23,771	23,771
		 mAb3 monomer - Fc/2	123,142	123,141	123,145
	F(ab) ₂ -Fc dimer, covalent w/ 14 Da linker	 Fc/2	23,771	23,771	23,771
		 F(ab) ₂ +Fc/2+14Da	123,170	123,169	123,164
	F(ab) ₂ -Fc dimer, non-dissociable	 Fc/2	23,771	23,771	23,771
		 F(ab) ₂ +Fc/2+unknown linkage mechanism	123,130	123,132	123,164

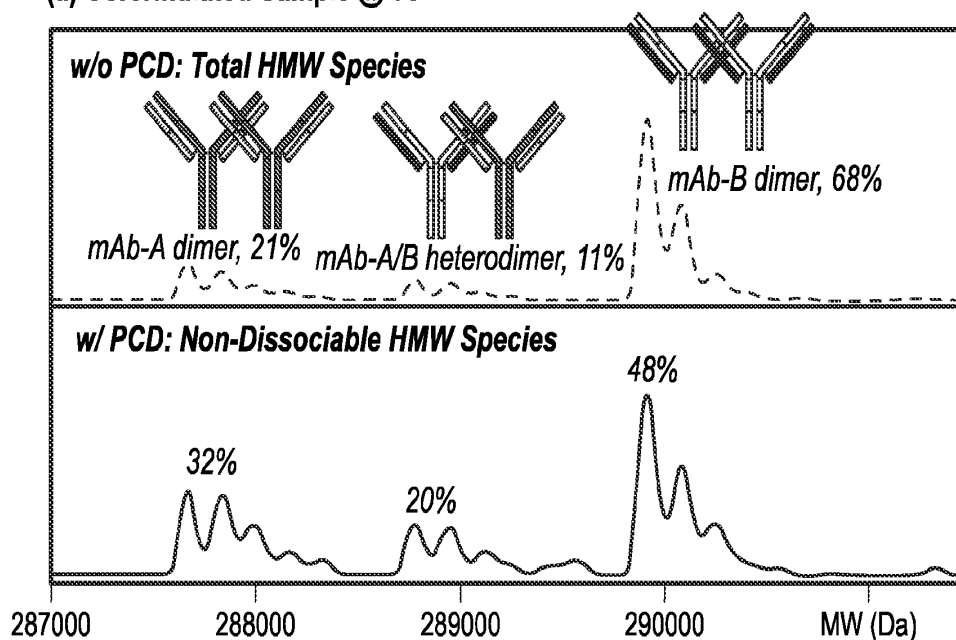
a. Artificial mAb4 dimer formed in gas phase (during monomer detection) was measured to be 293,815 Da and 293,823 Da in lot 1 and lot 2, respectively.

b. Artificial F(ab)₂ dimer formed in gas phase (during F(ab)₂ monomer detection) was measured to be 198,786 Da and 198,791 Da in lot 1 and lot 2, respectively.

FIG. 10

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(a) Coformulated Sample @ T0



(b) Coformulated Sample Stressed @ 25 °C for 6 months

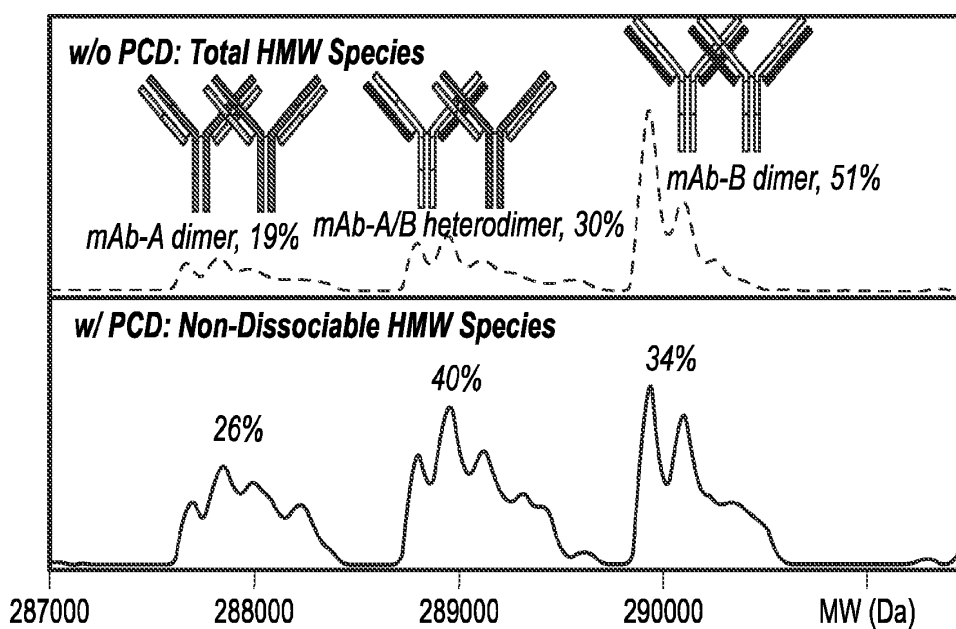


FIG. 11

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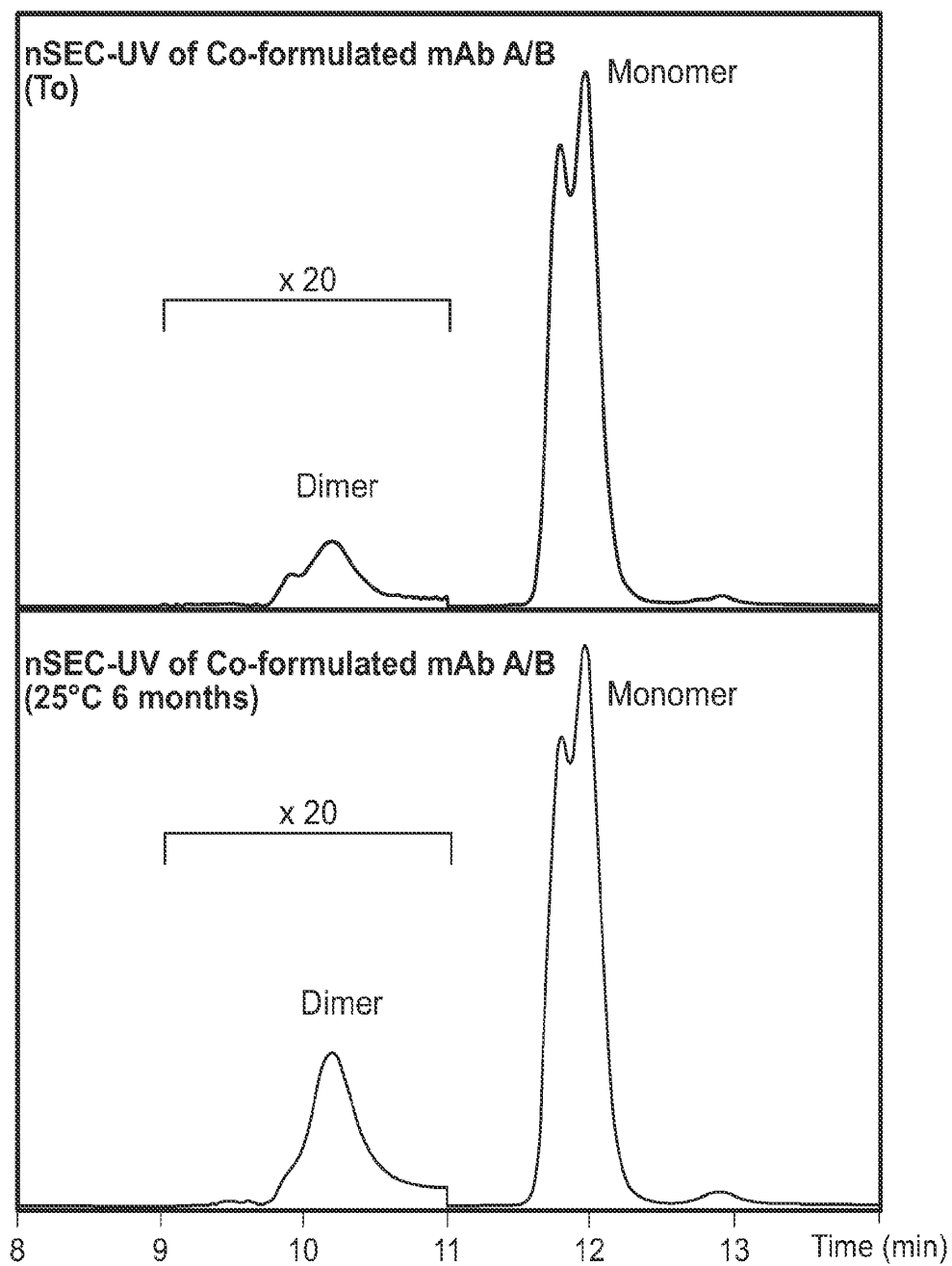


FIG. 12