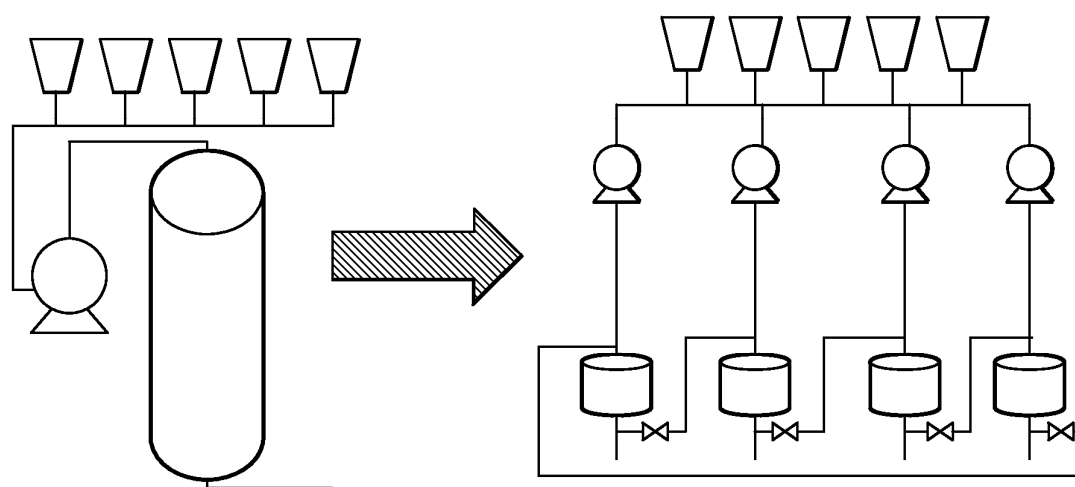


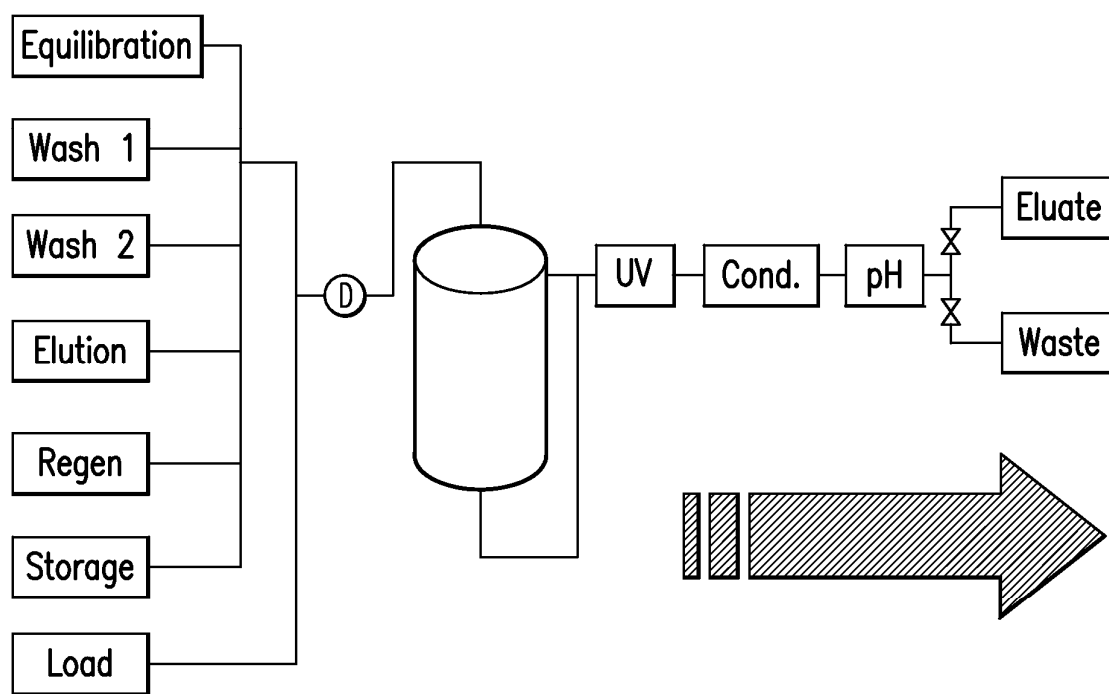
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Conventional chromatography flow diagram vs. SMB

FIG. 1

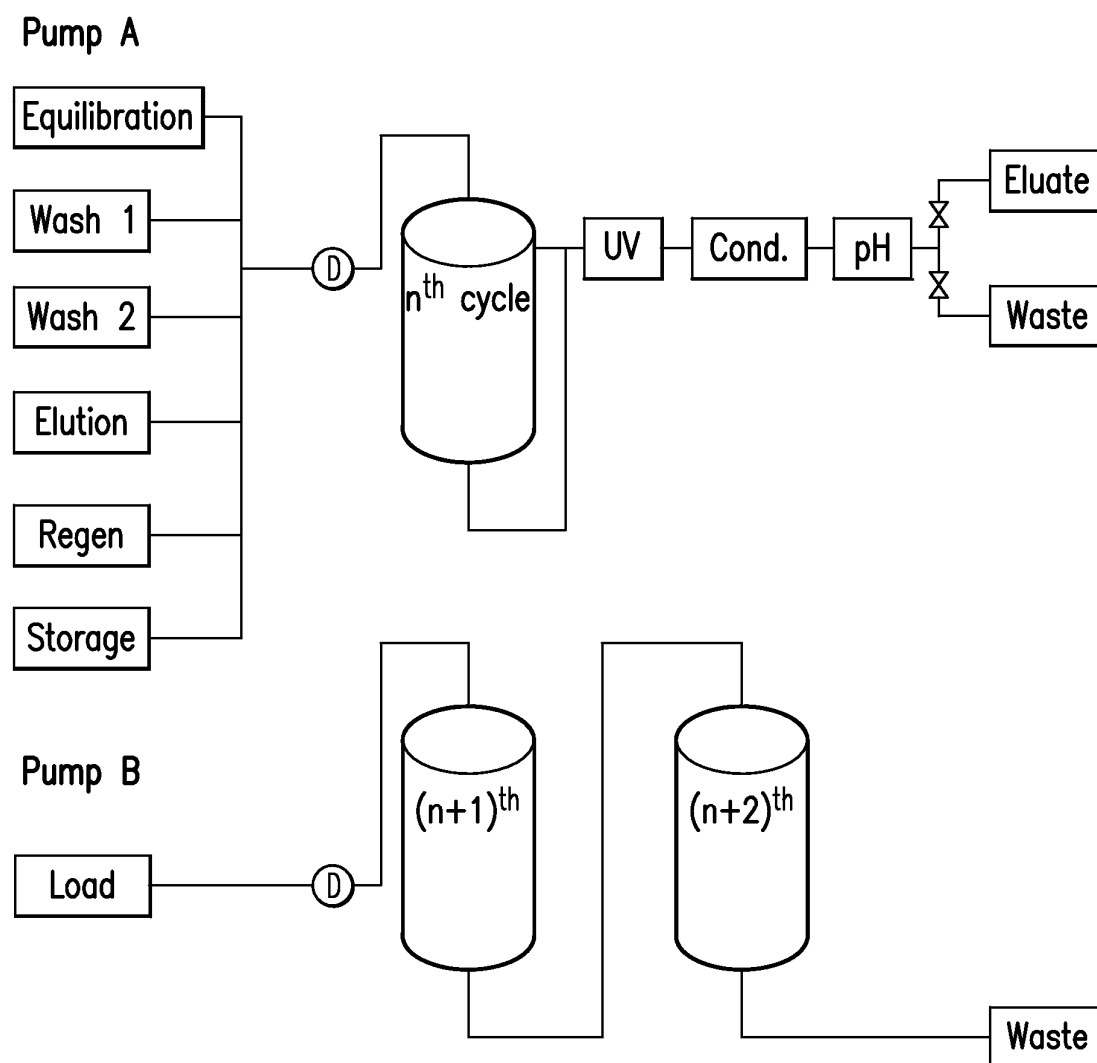
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Conventional chromatography flow diagram

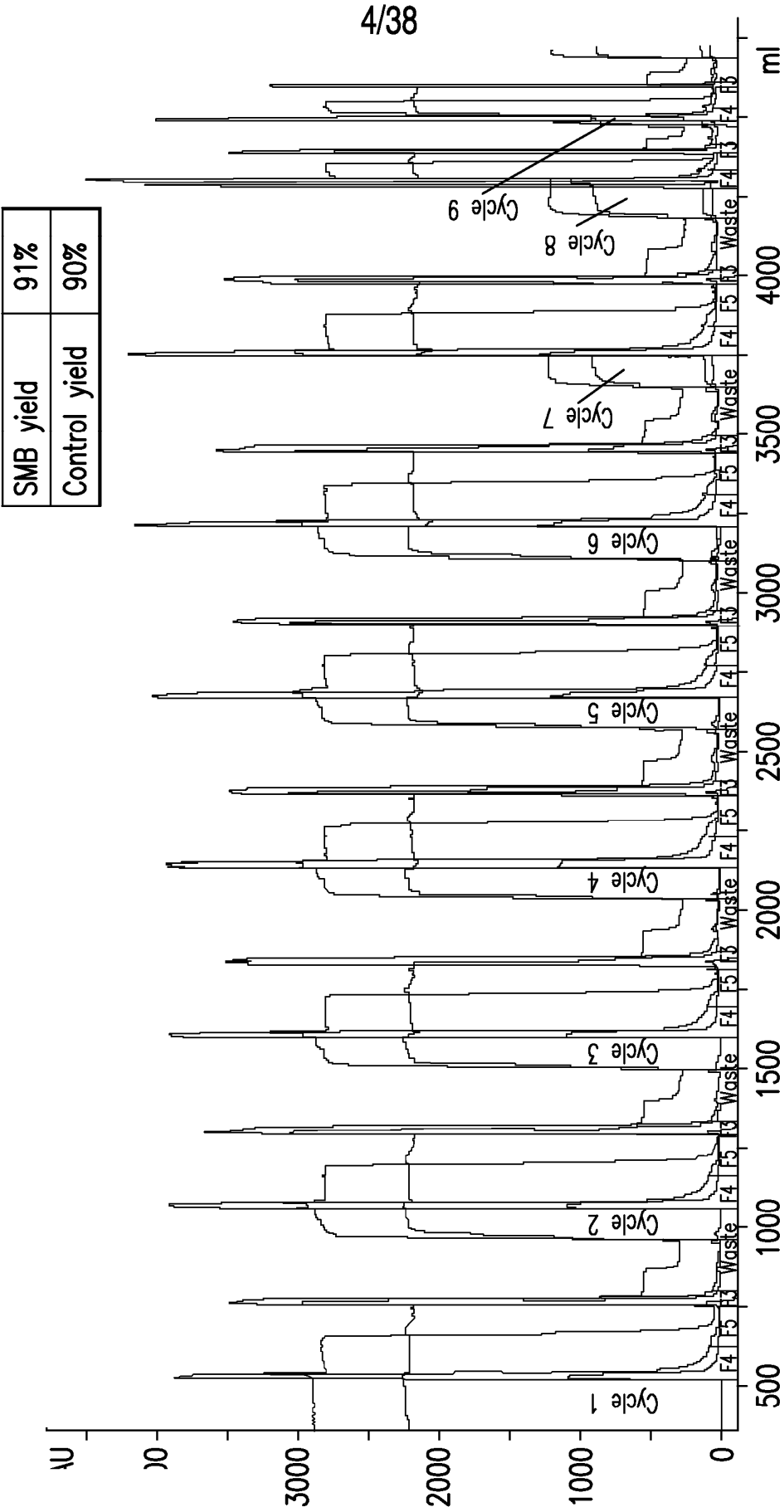
FIG. 2

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SMB chromatography flow diagram

FIG. 3



Chromatogram of SMB case study for mAb X

FIG. 4

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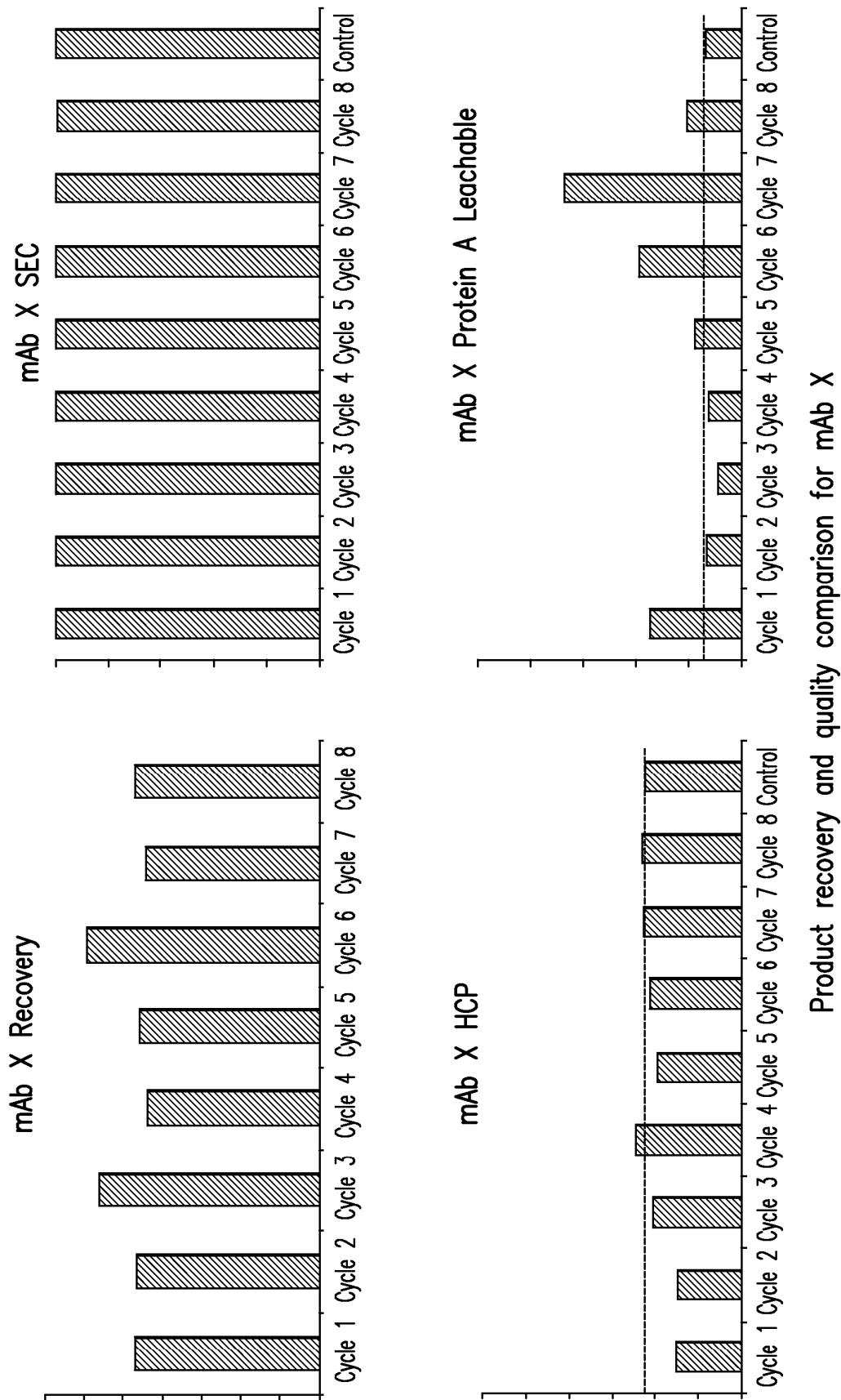
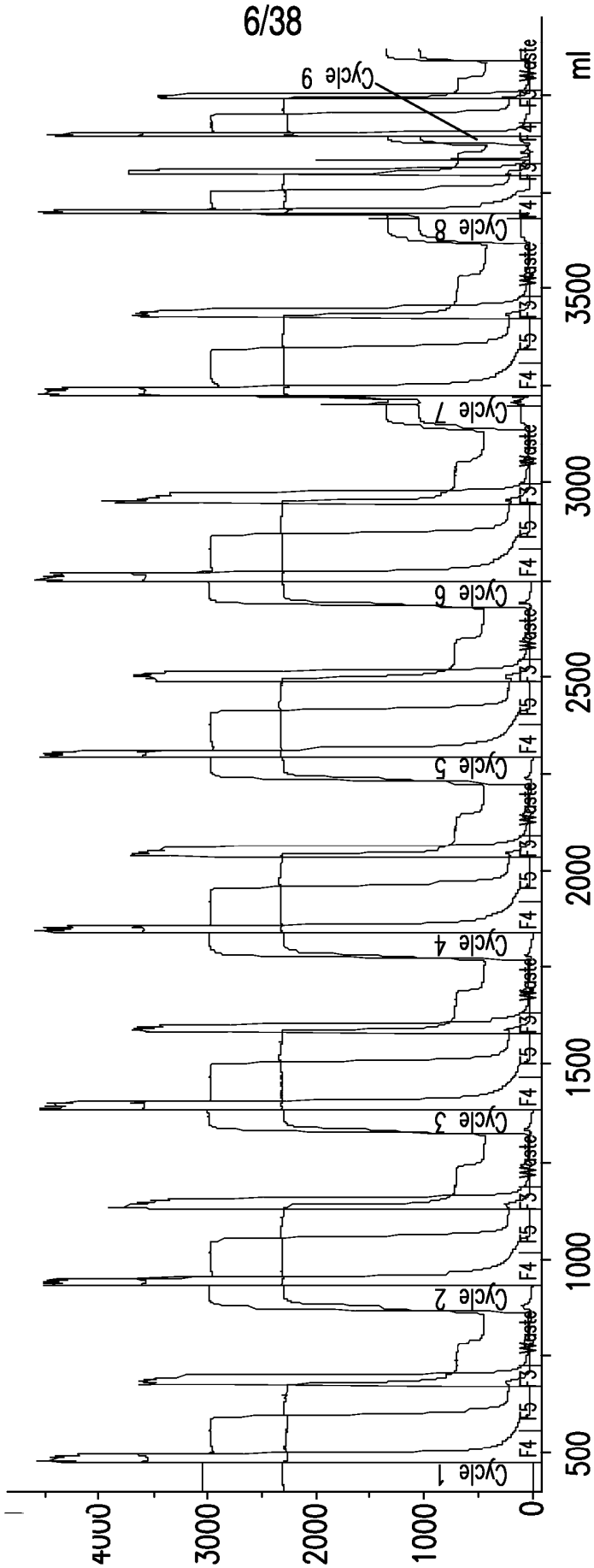


FIG. 5

SMB yield	92%
Control yield	103%



Chromatogram of SMB case study for mAb Y

FIG. 6

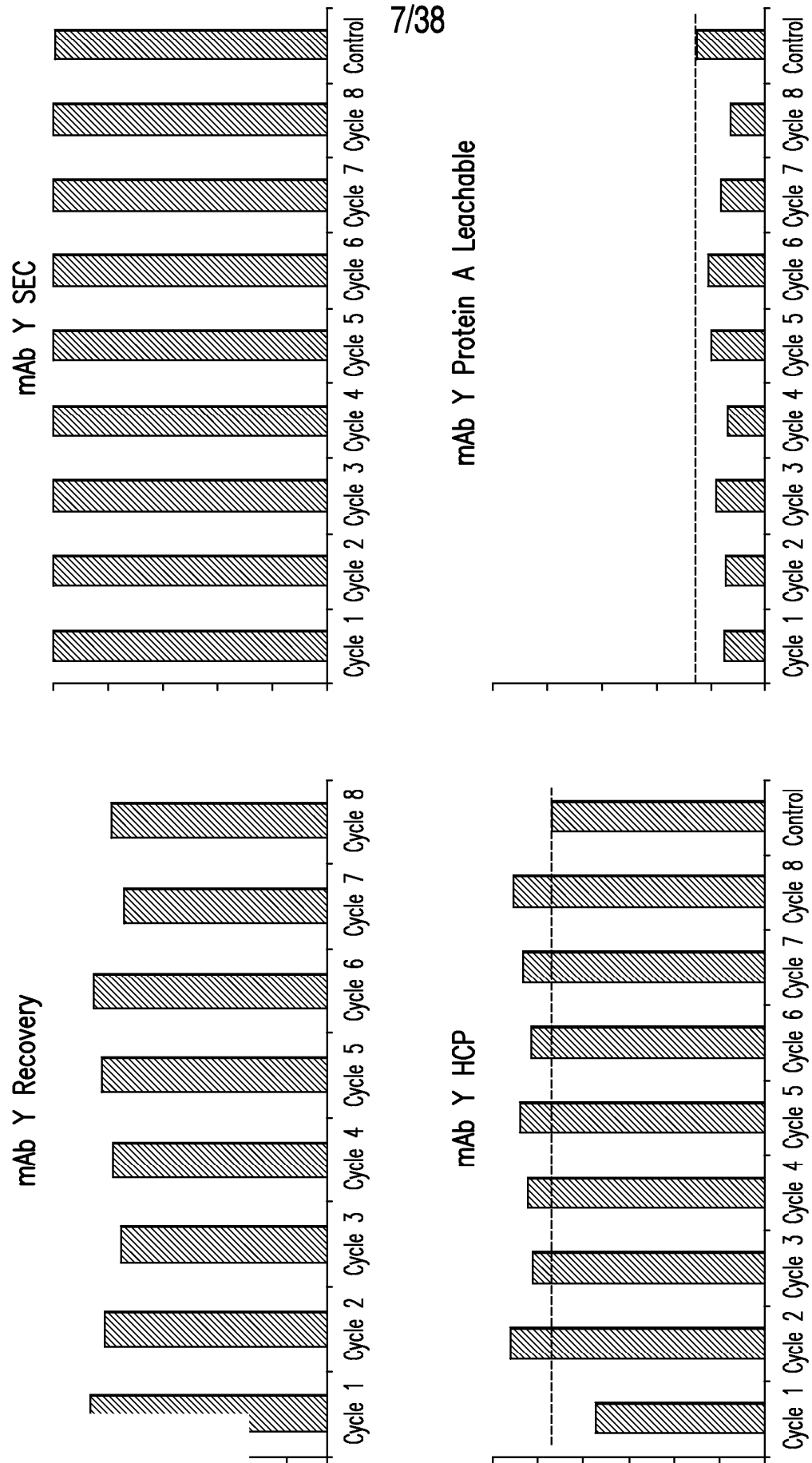


FIG. 7

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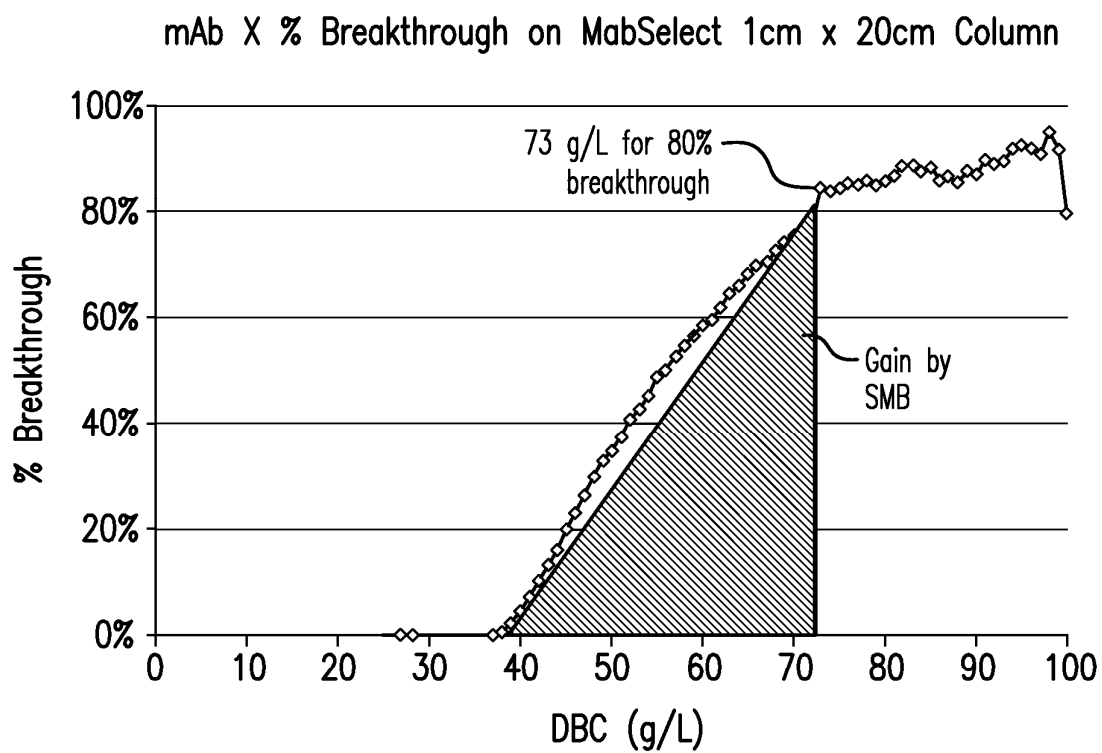


FIG. 8

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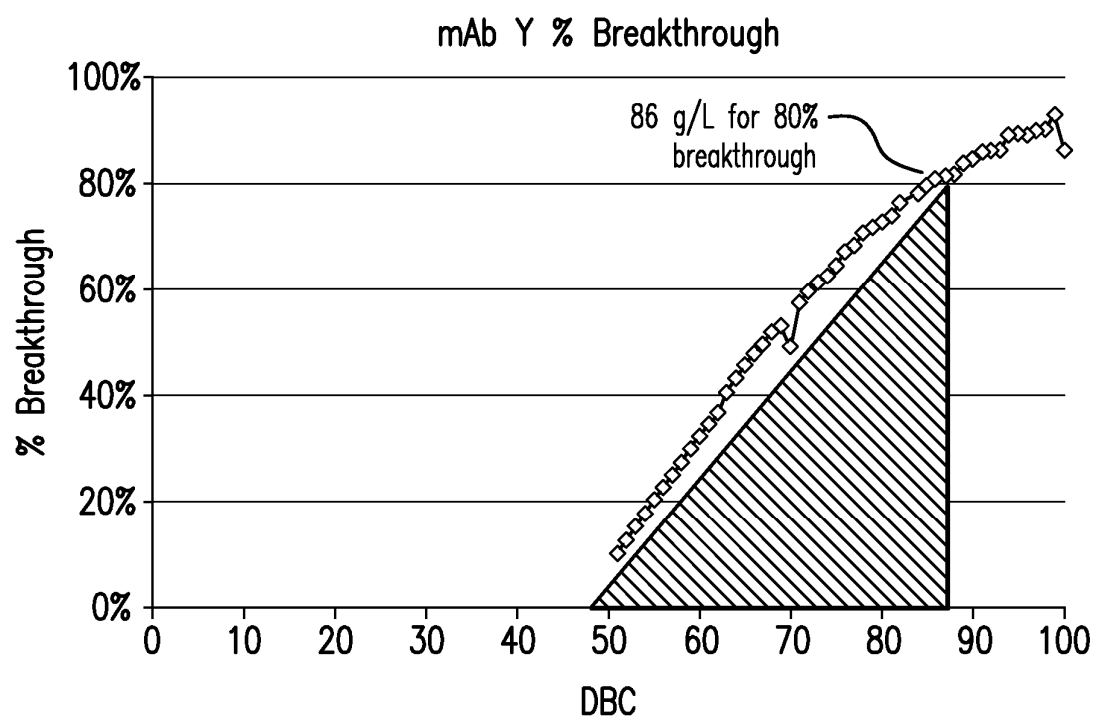


FIG. 9

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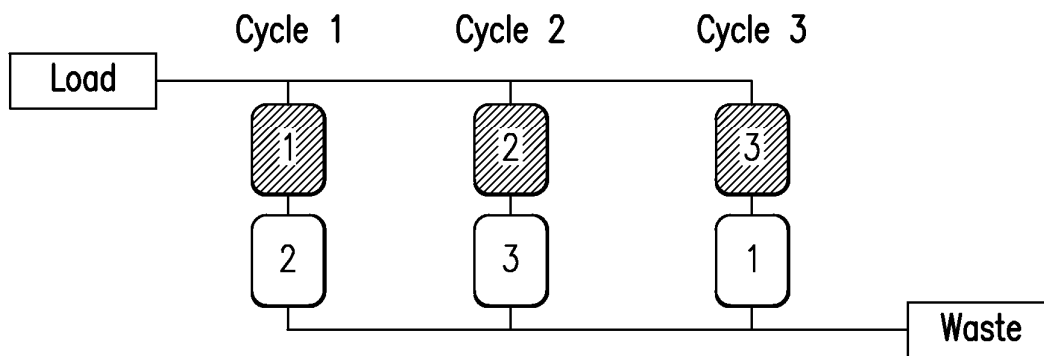


FIG. 10

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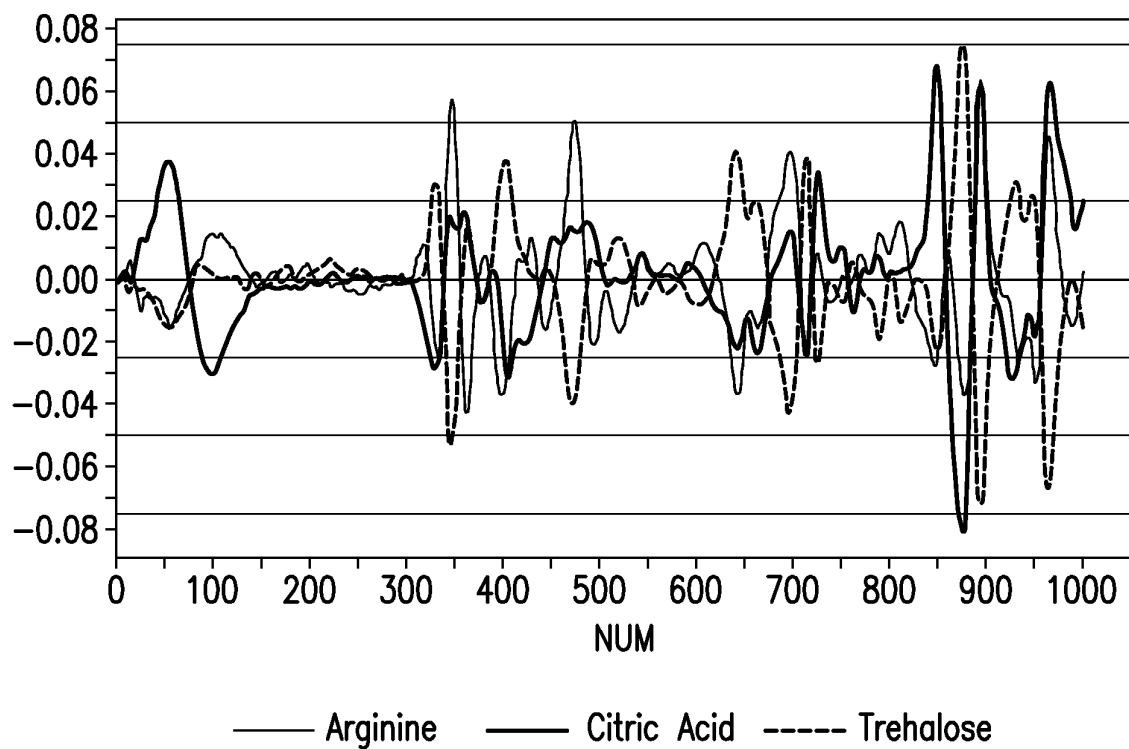


FIG. 11

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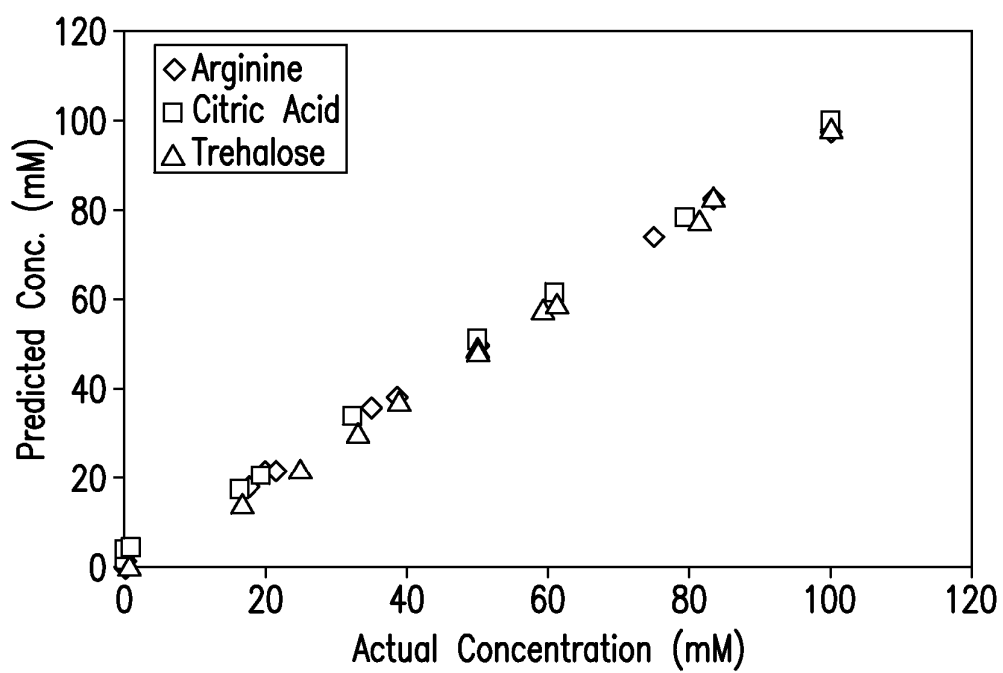


FIG. 12

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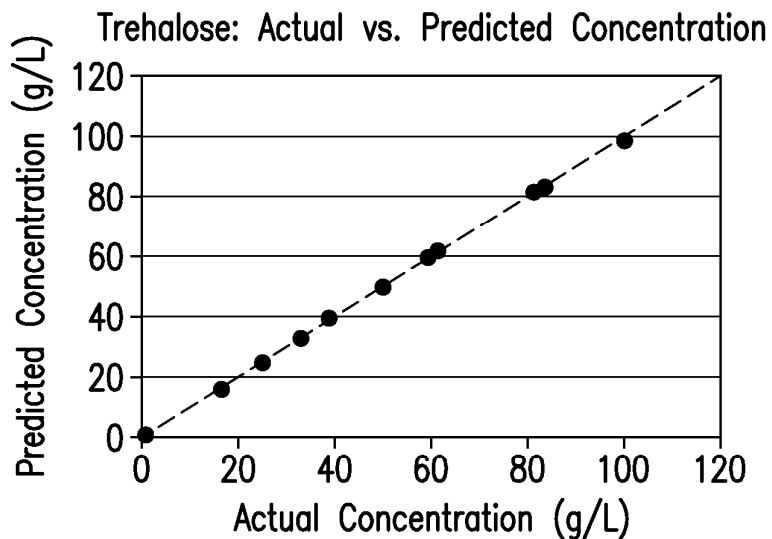
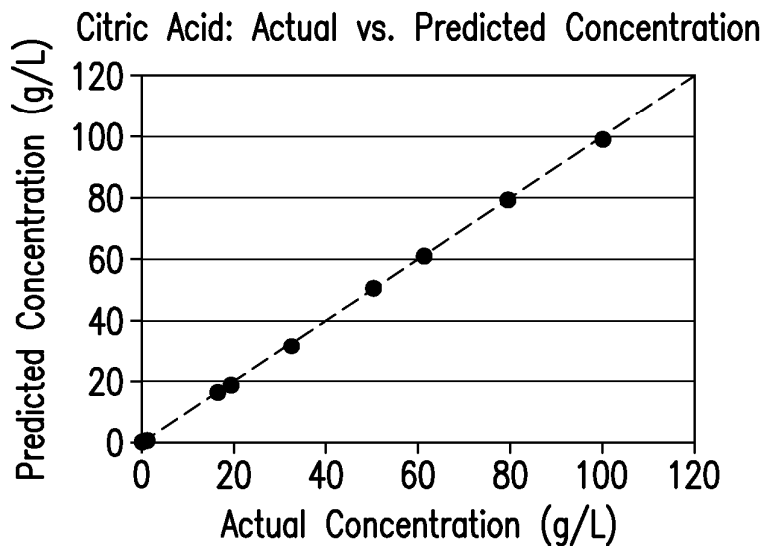
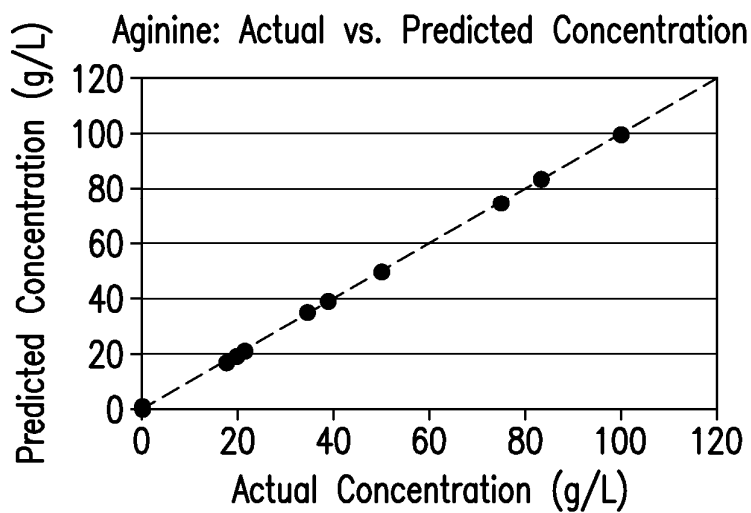


FIG. 13

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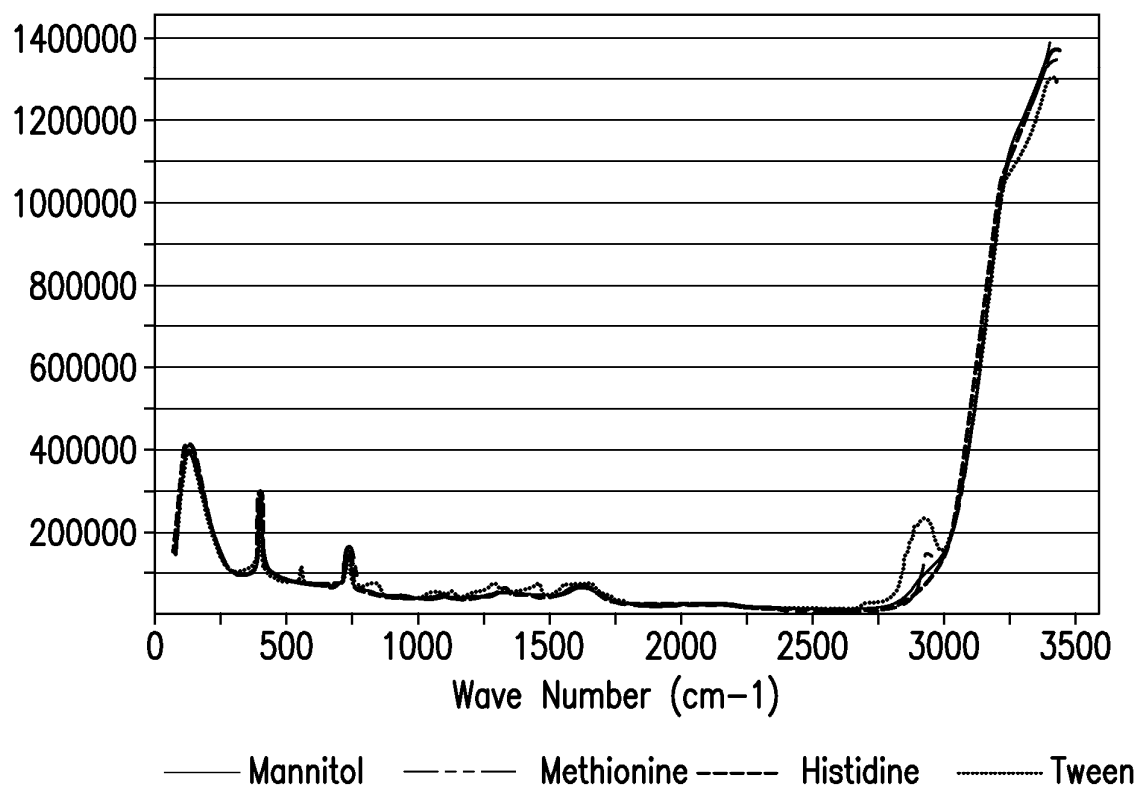


FIG. 14

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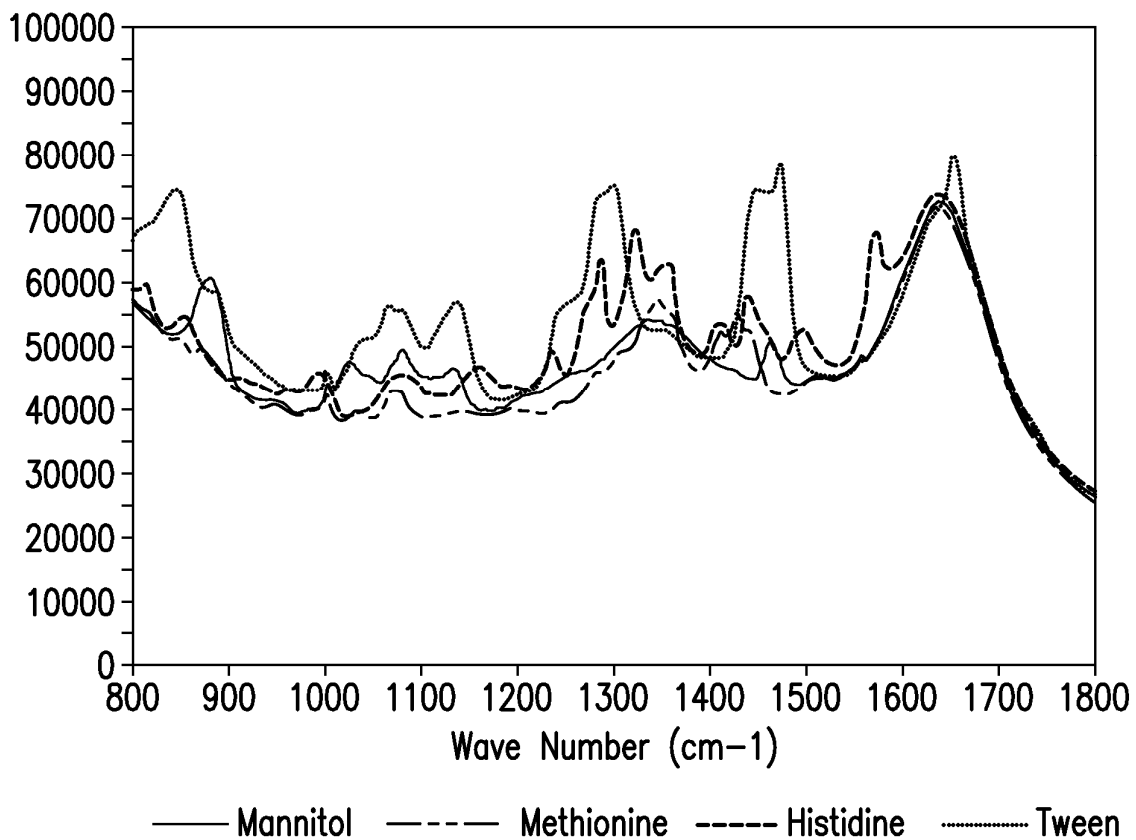


FIG. 15

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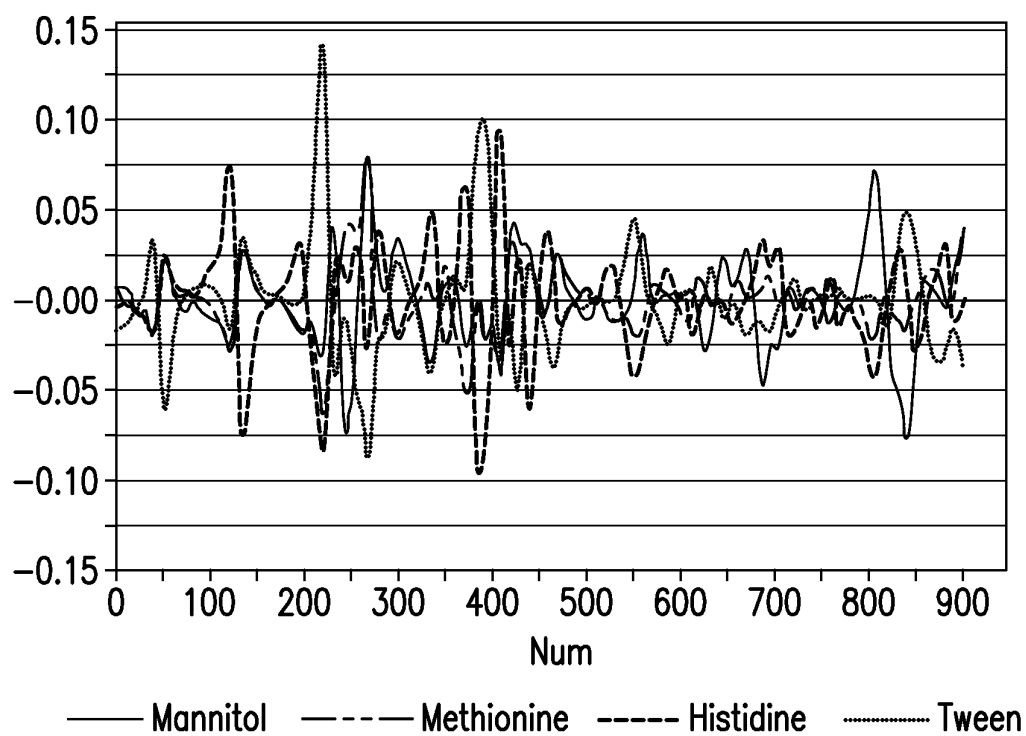


FIG. 16

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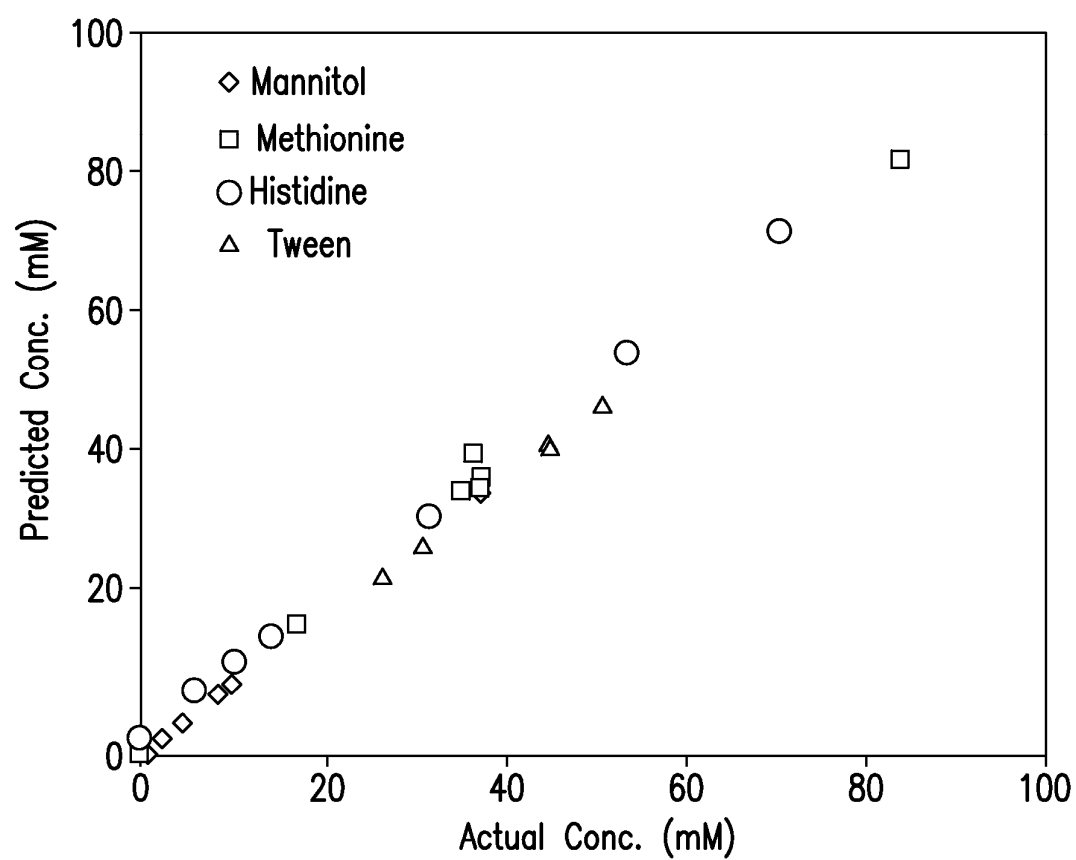


FIG. 17

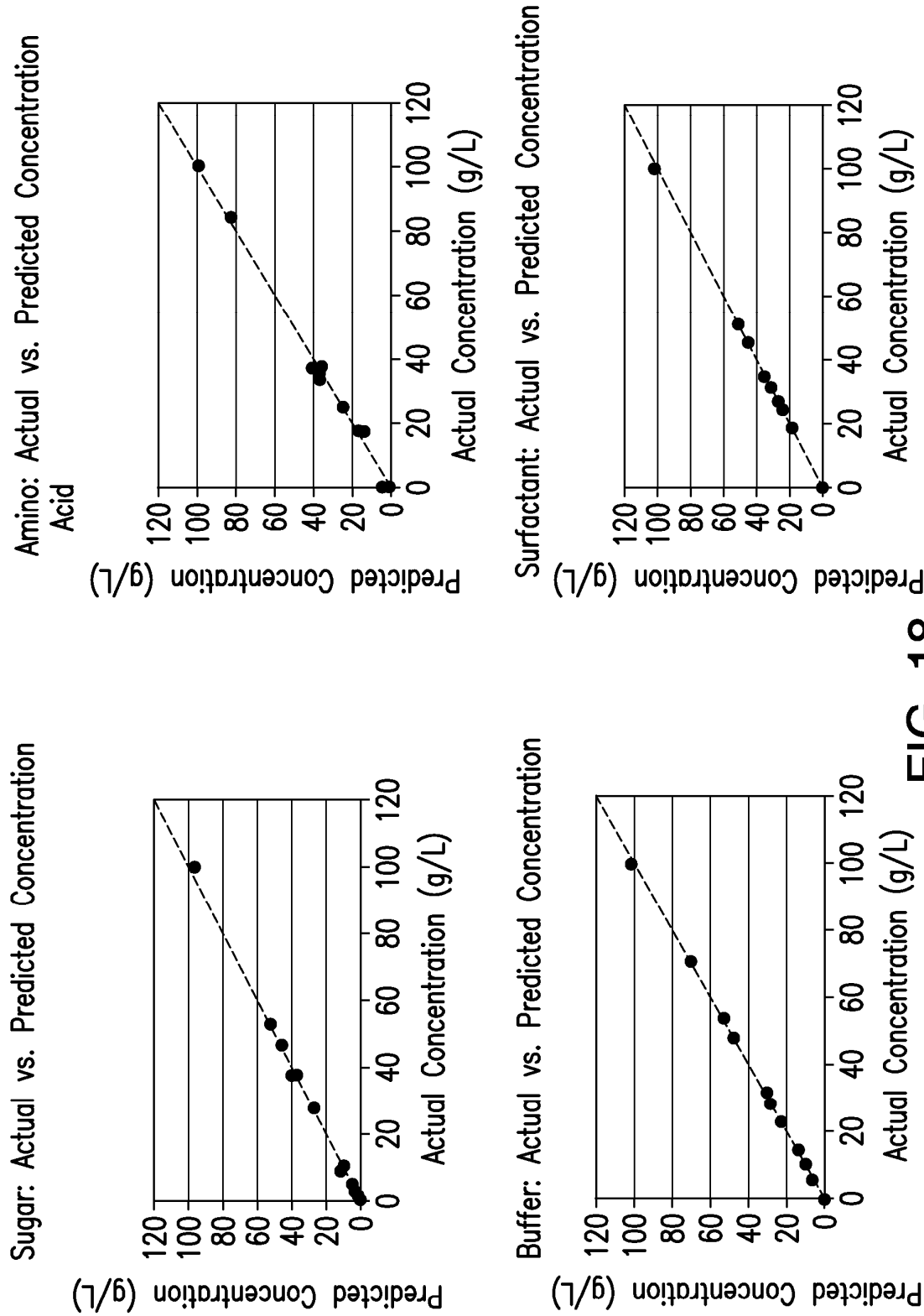


FIG. 18

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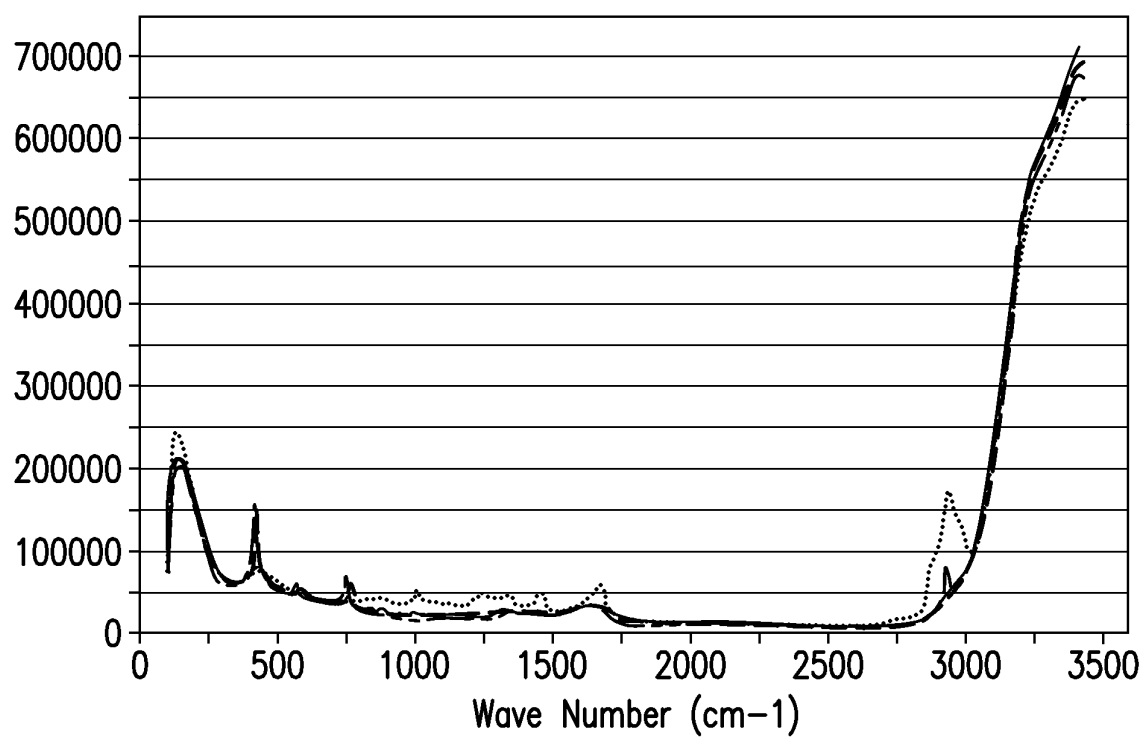


FIG. 19

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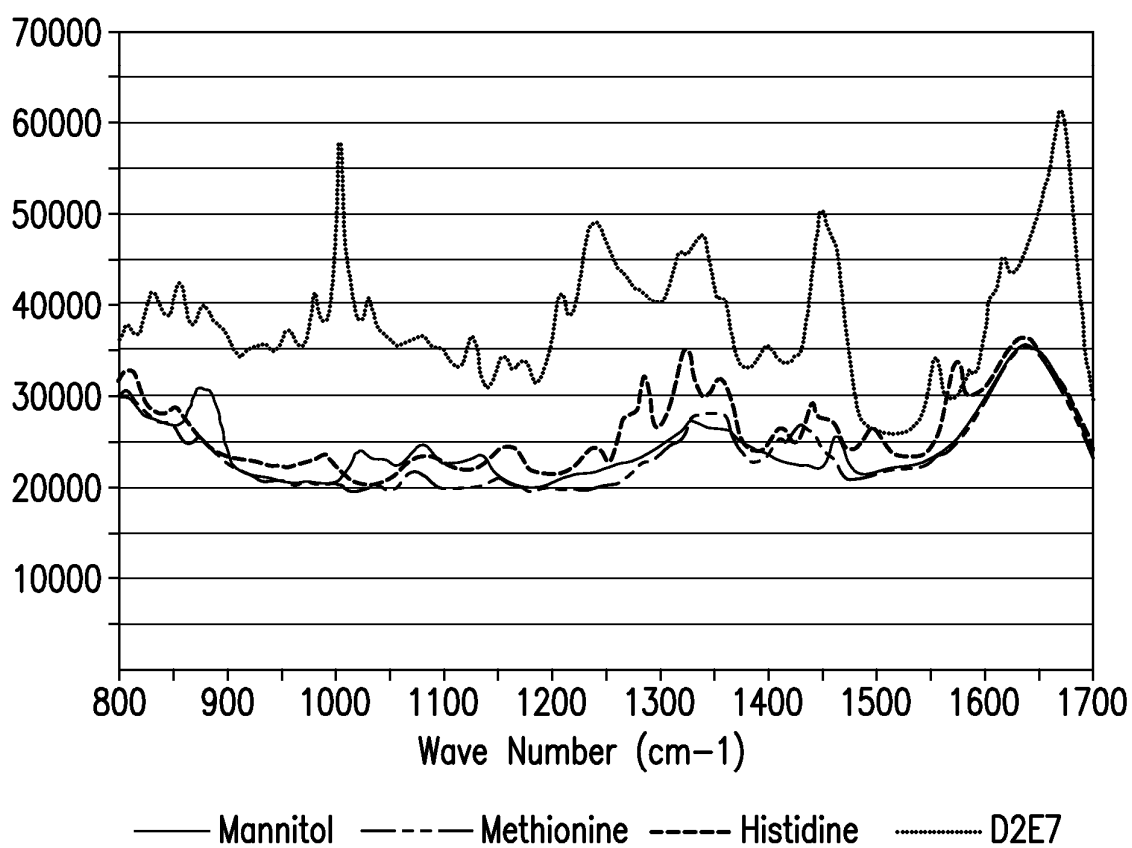


FIG. 20

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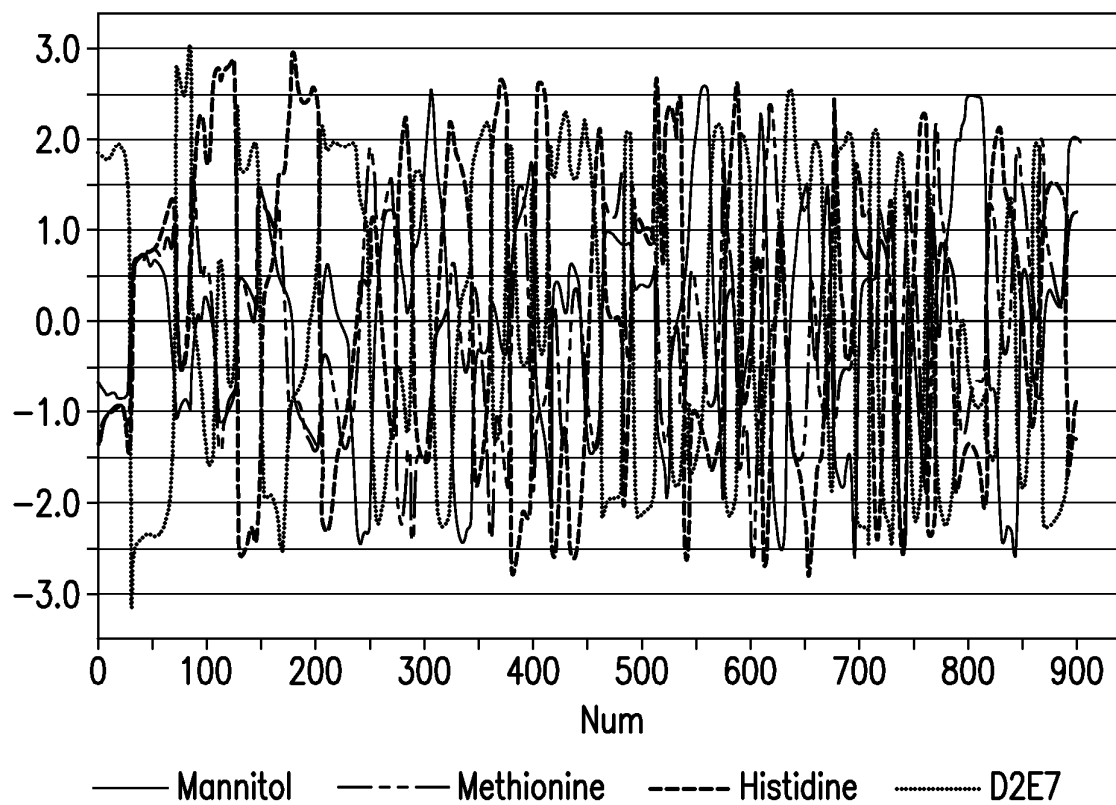


FIG. 21

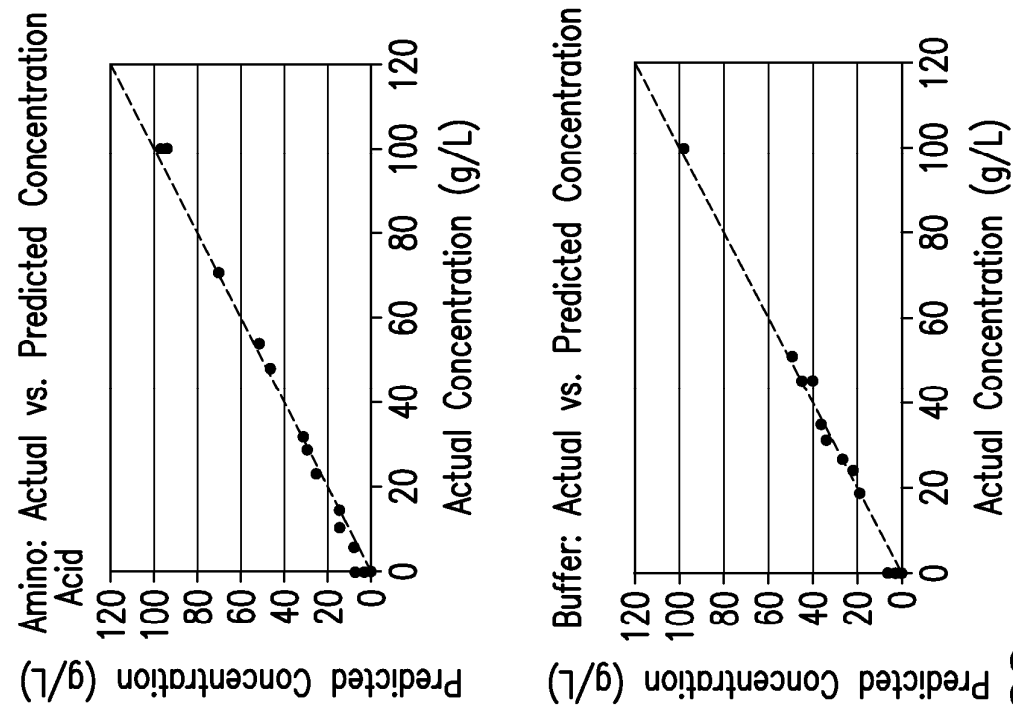


FIG. 22

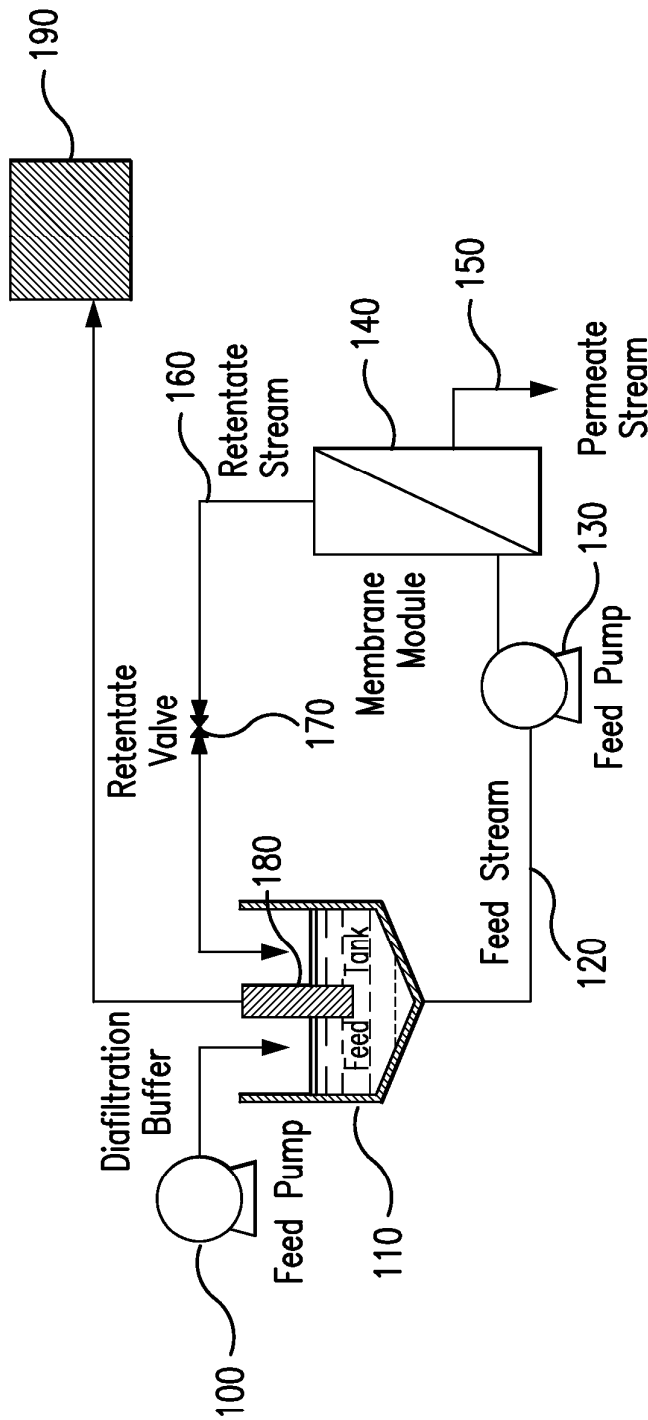
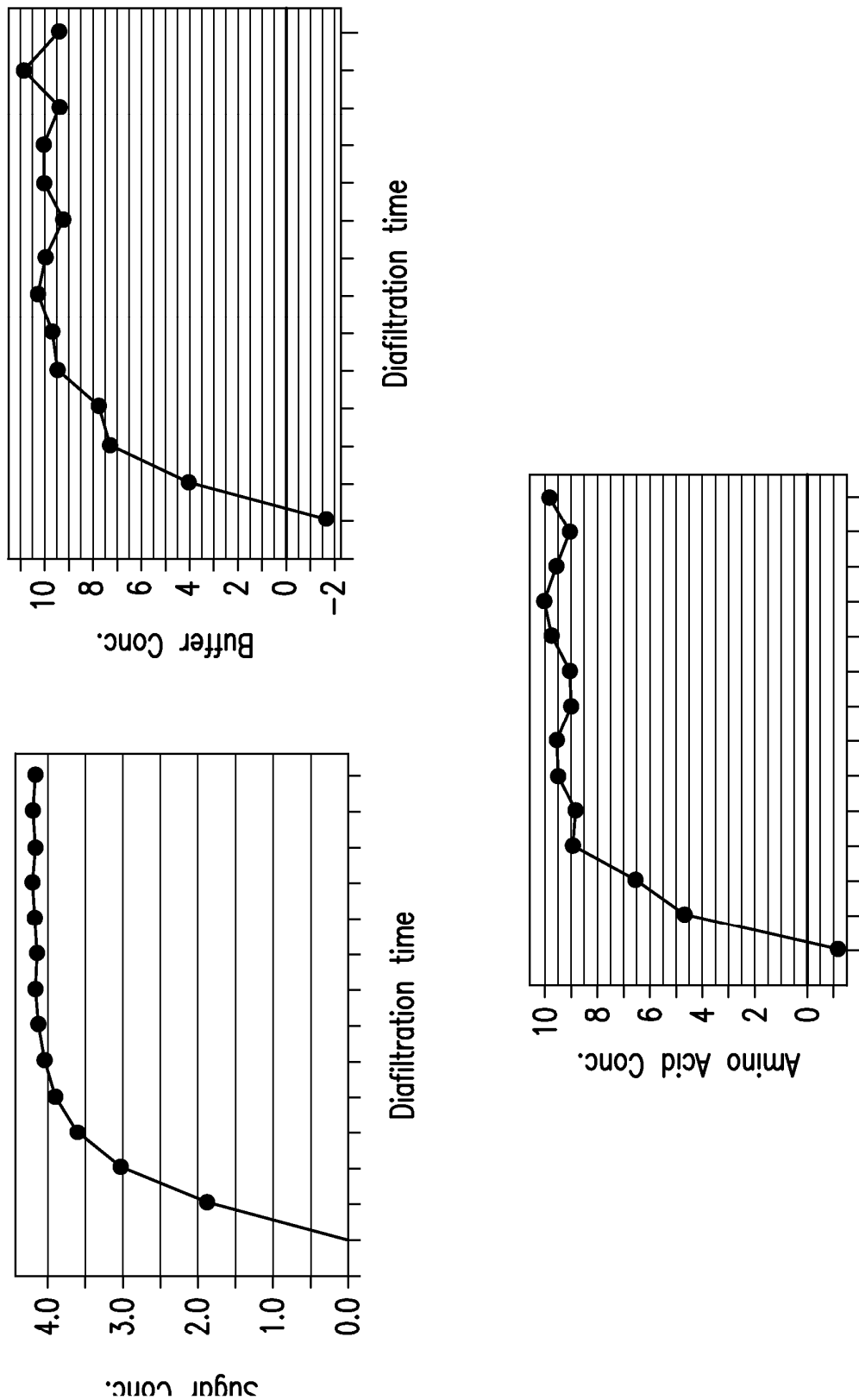


FIG. 23



Diafiltration time

FIG. 24

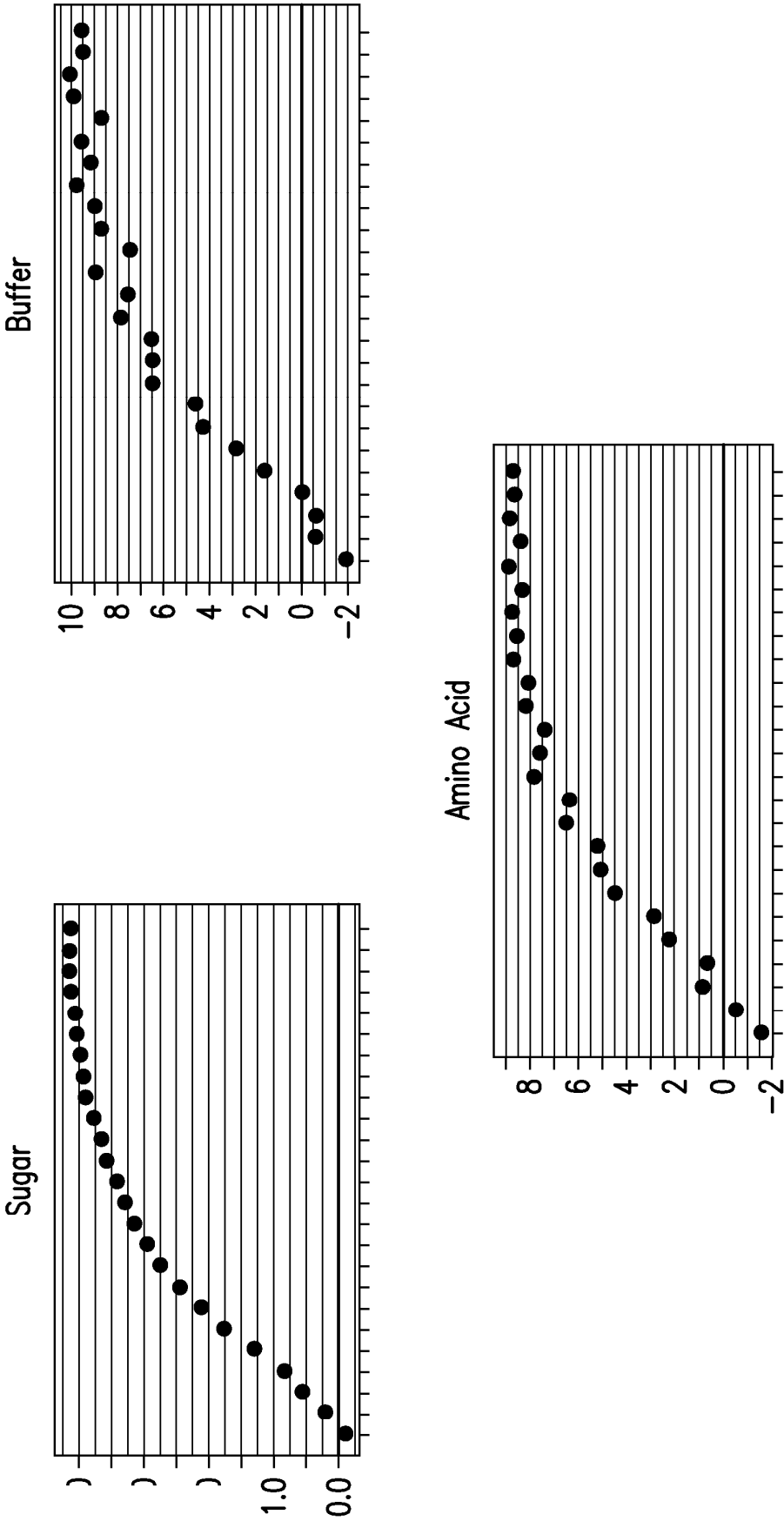


FIG. 25

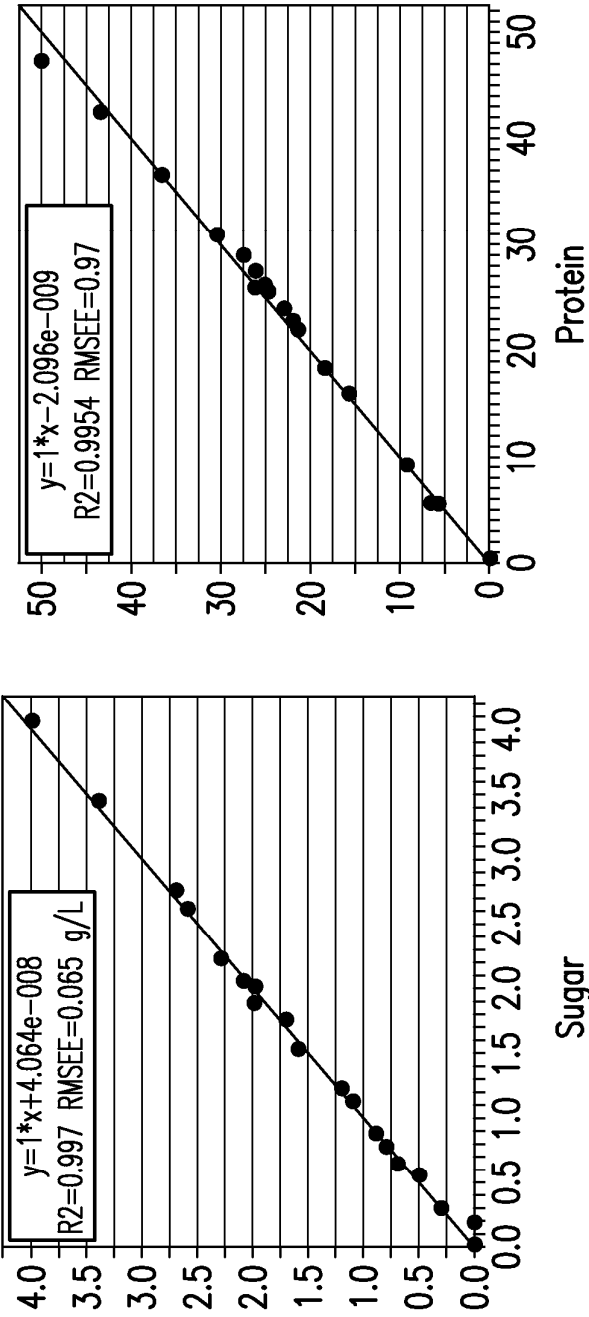


FIG. 26

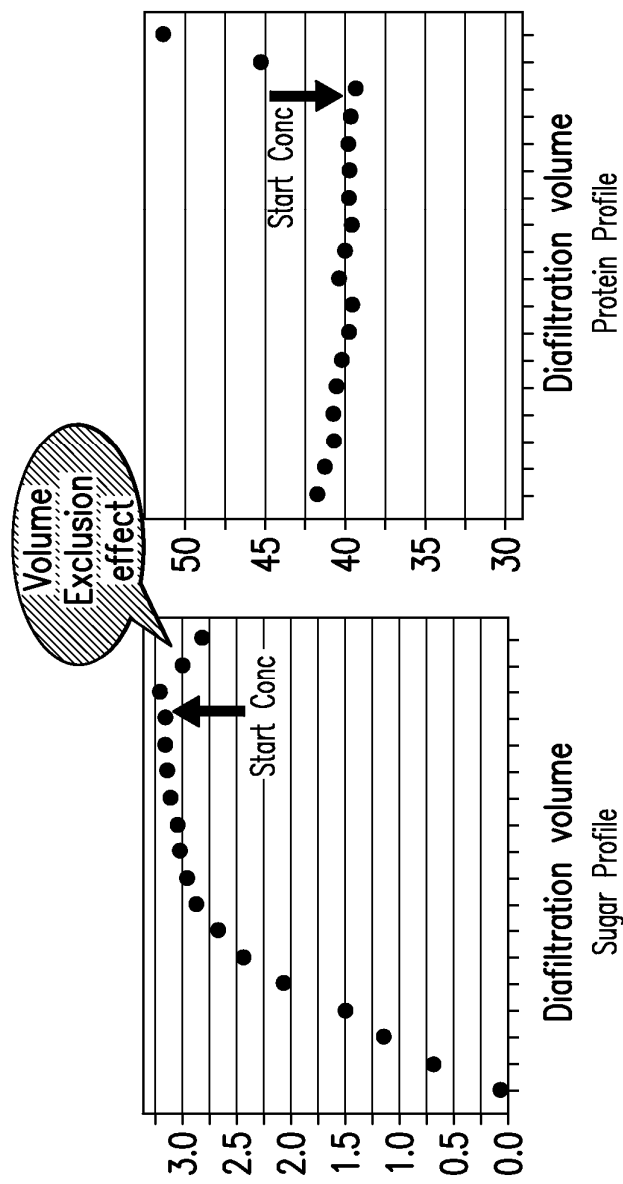


FIG. 27

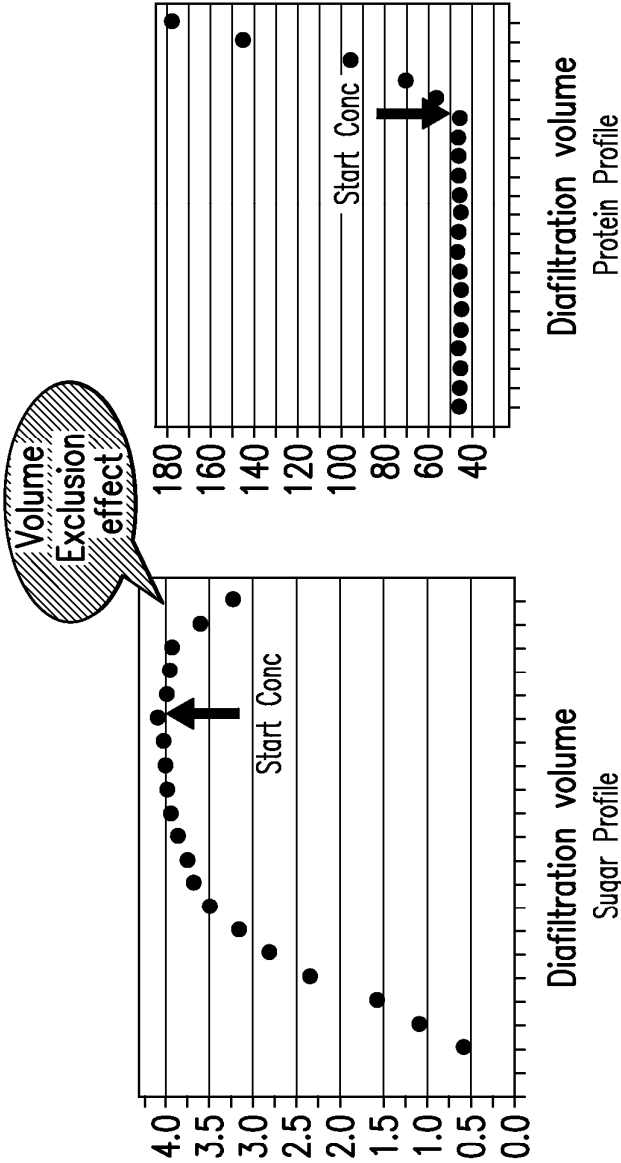


FIG. 28

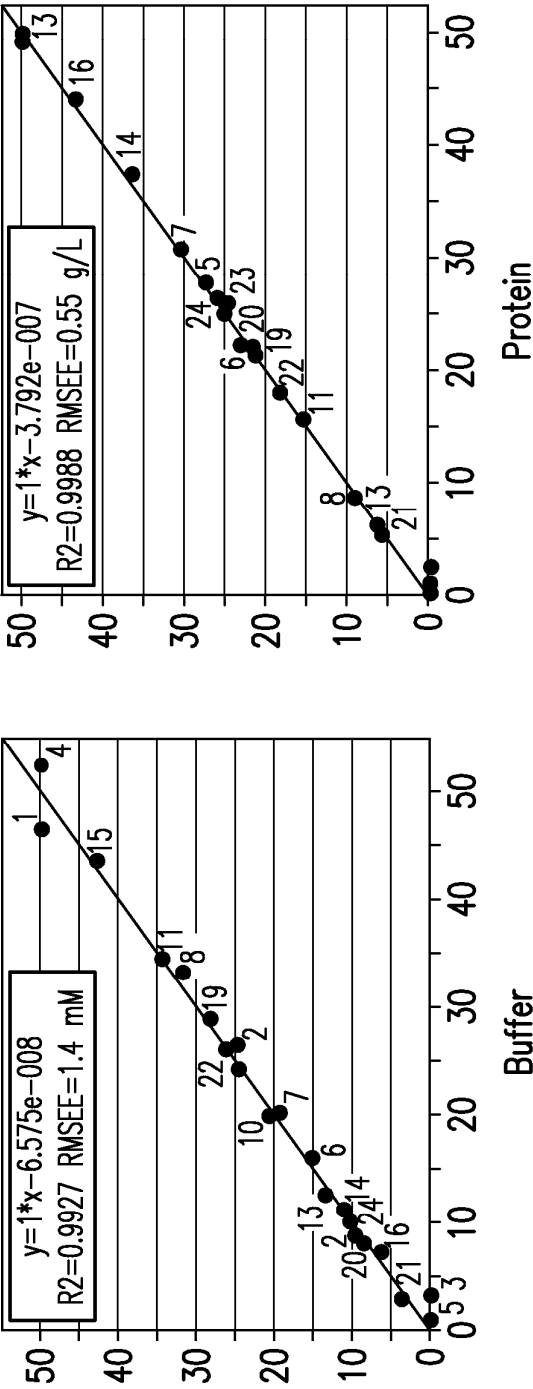


FIG. 29

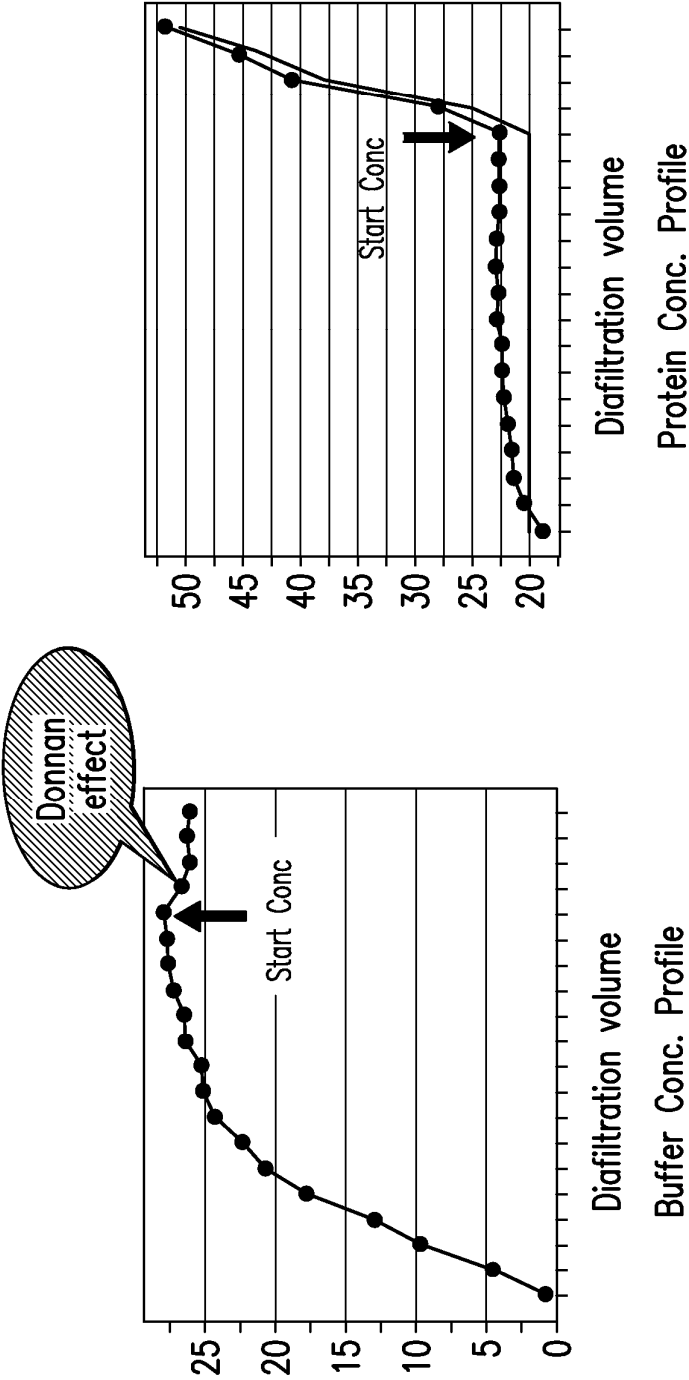


FIG. 30

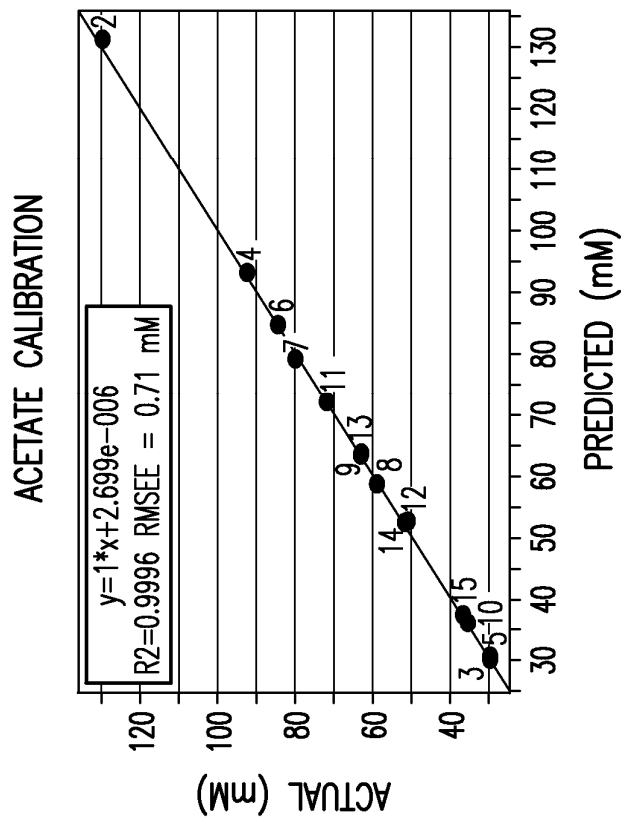


FIG. 31B

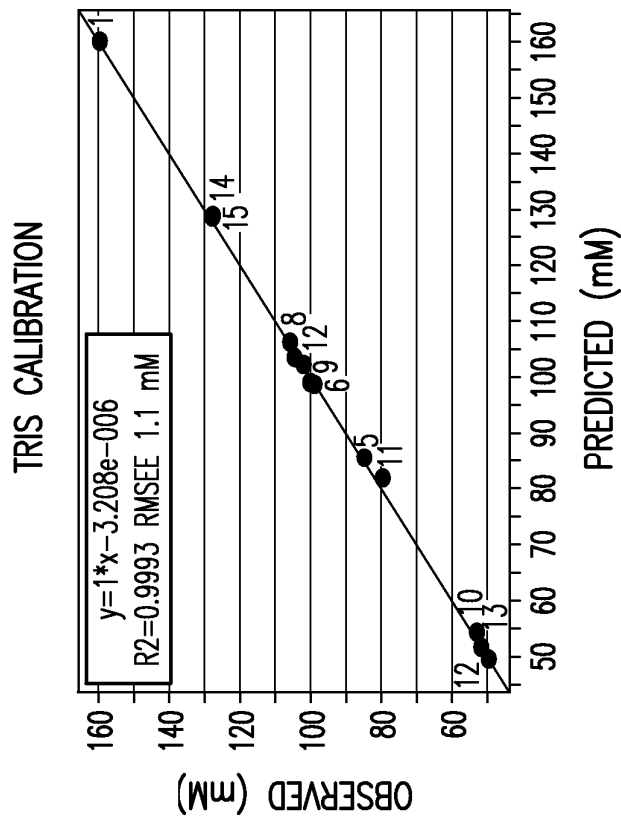


FIG. 31A

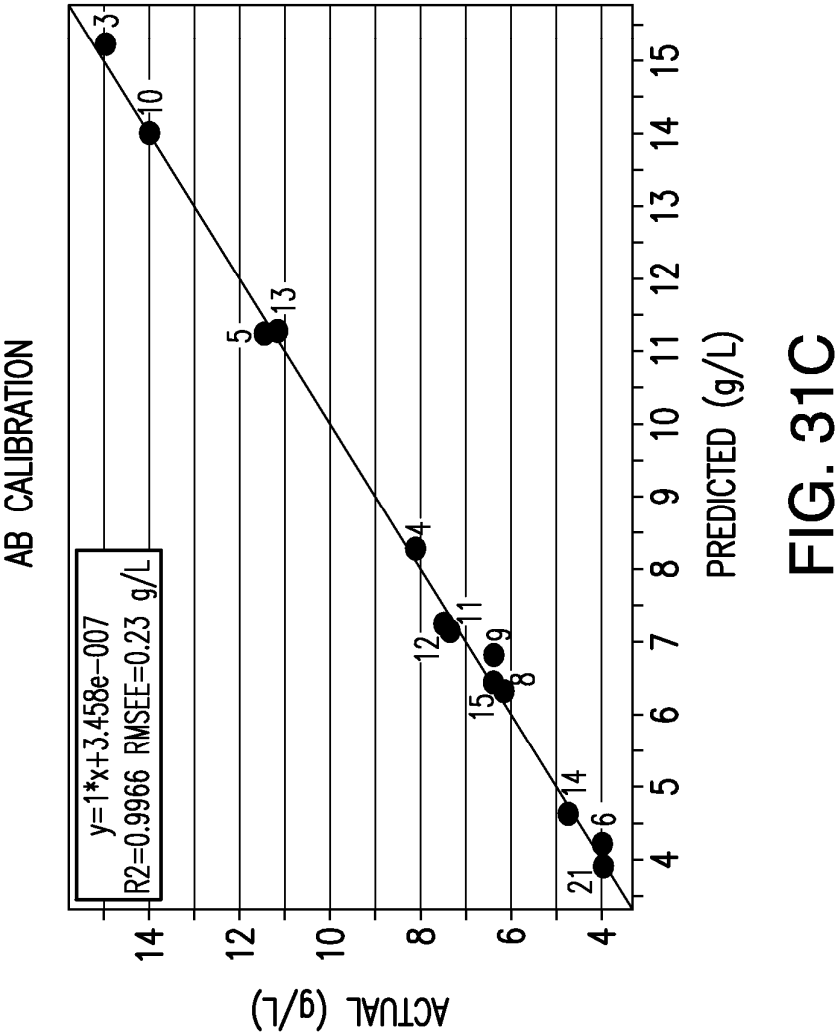


FIG. 31C

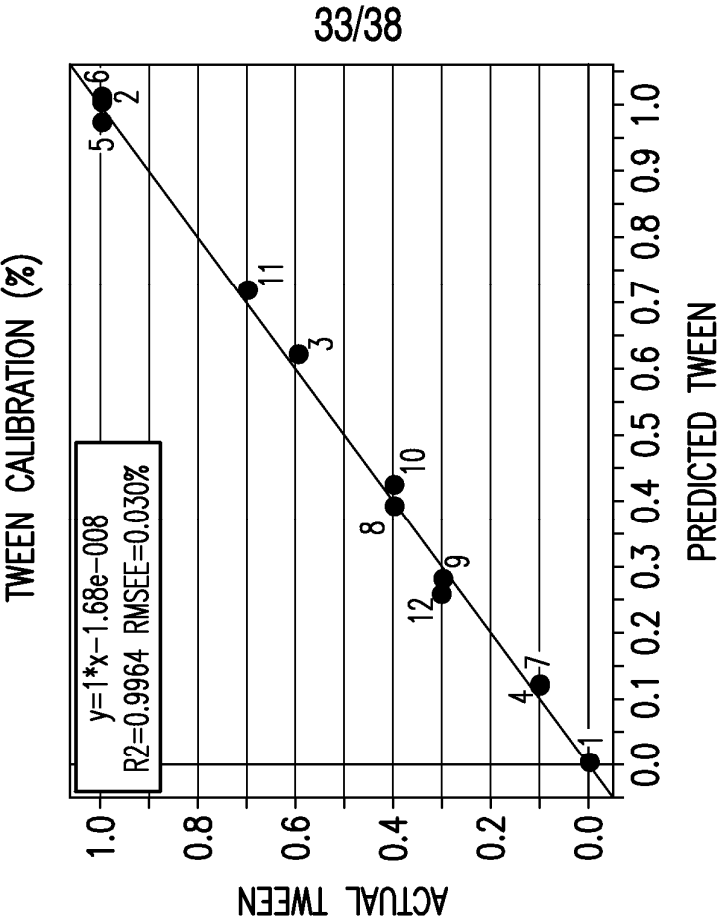


FIG. 32A

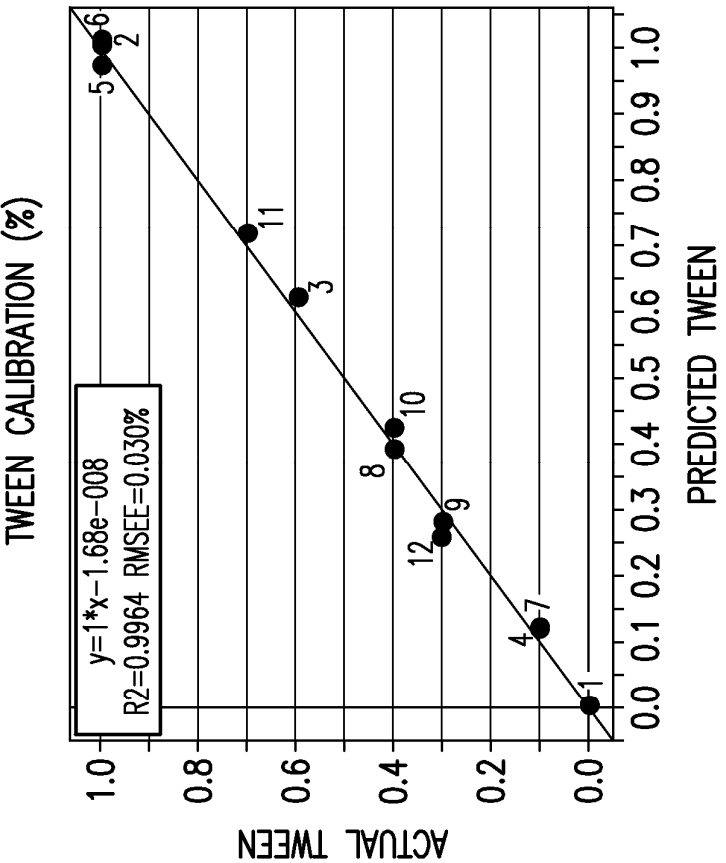


FIG. 32B

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Sample	Vial	Condition	Conc	min	uL inj.	HMW1	HMW2	HMW3	Mono- mer	frag	LMW	sum HMW	sum LMW	Sum
A0.5		D2E7 25mg/mL 0hr	25	0	2			0.112	99.888			0.112	0.000	100.000
A1		D2E7 25mg/mL 0.5hr	25	35	2	0.194		4.783	95.023			4.977	0.000	100.000
A2		D2E7 25mg/mL 1hr	25	65	2	0.212		5.091	94.698			5.303	0.000	100.000
A3		D2E7 25mg/mL 2hr	25	128	2	0.241		5.443	94.316			5.684	0.000	100.000
A4		D2E7 25mg/mL 3hr	25	190	2	0.246		5.525	94.229			5.771	0.000	100.000
B0		D2E7 25mg/mL 4hr	25	240	2	0.248		5.562	94.190			5.810	0.000	100.000
B0.5		874 25mg/mL 0hr	25	0	2			0.180	99.755	0.065		0.180	0.065	100.000
B1		874 25mg/mL 0.5hr	25	35	2	0.179		7.088	92.670	0.063		7.267	0.063	100.000
B2		874 25mg/mL 1hr	25	65	2			4.406	95.531	0.063		4.406	0.063	100.000
B3		874 25mg/mL 2hr	25	128	2	0.182		5.751	94.007	0.060		5.933	0.060	100.000
B4		874 25mg/mL 3hr	25	190	2	0.227		6.812	92.897	0.064		7.039	0.064	100.000
		874 25mg/mL 4hr	25	240	2	0.404		7.823	91.710	0.063		8.227	0.063	100.000

FIG. 33

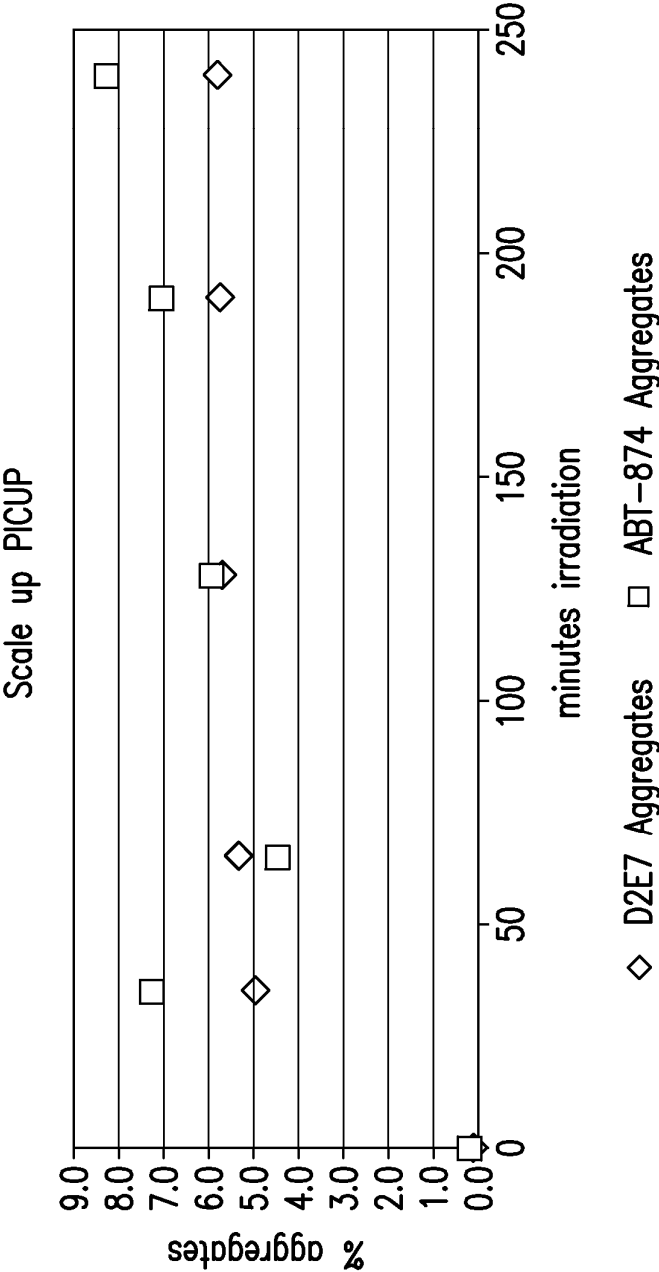


FIG. 34

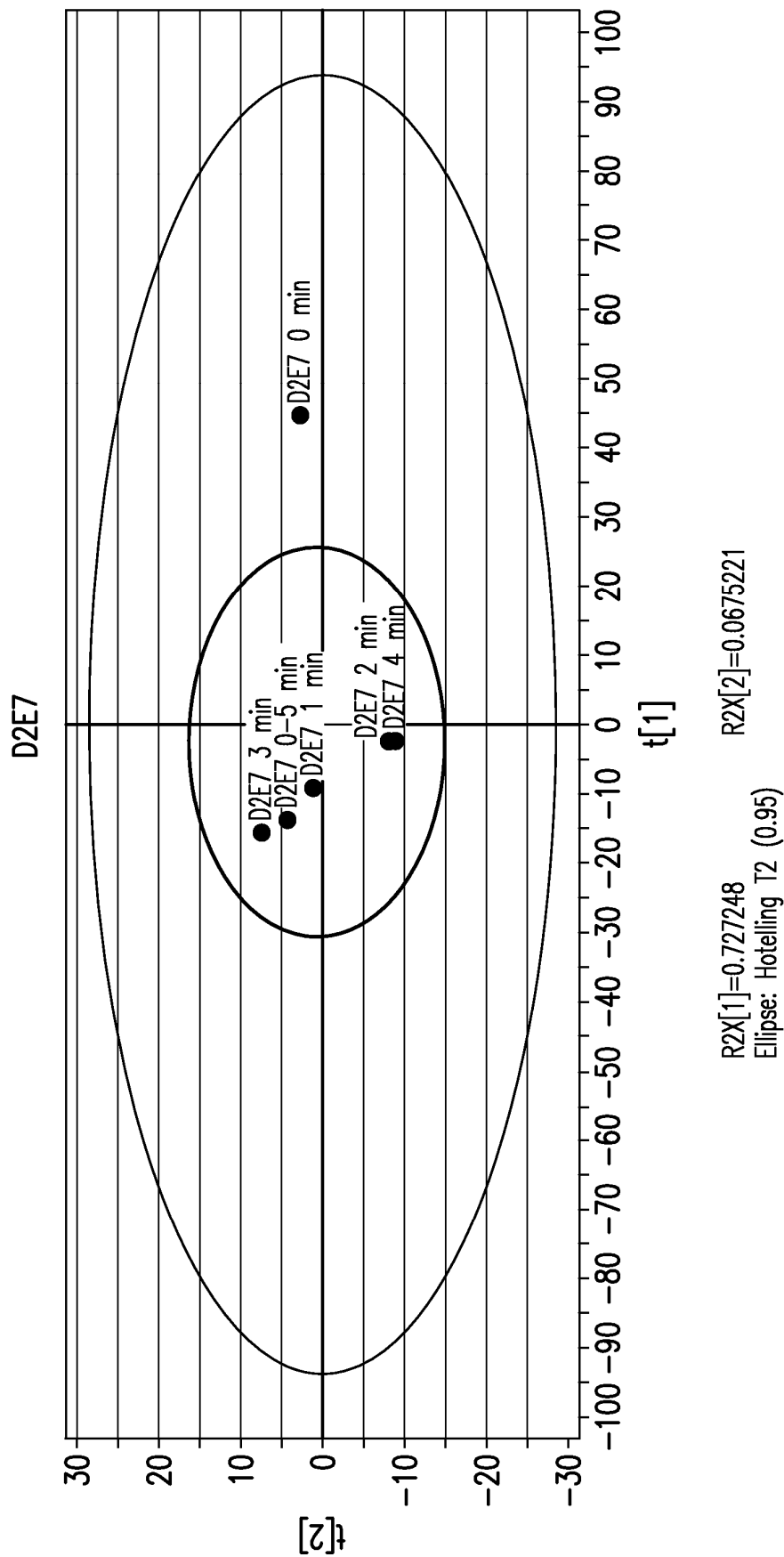


FIG. 35

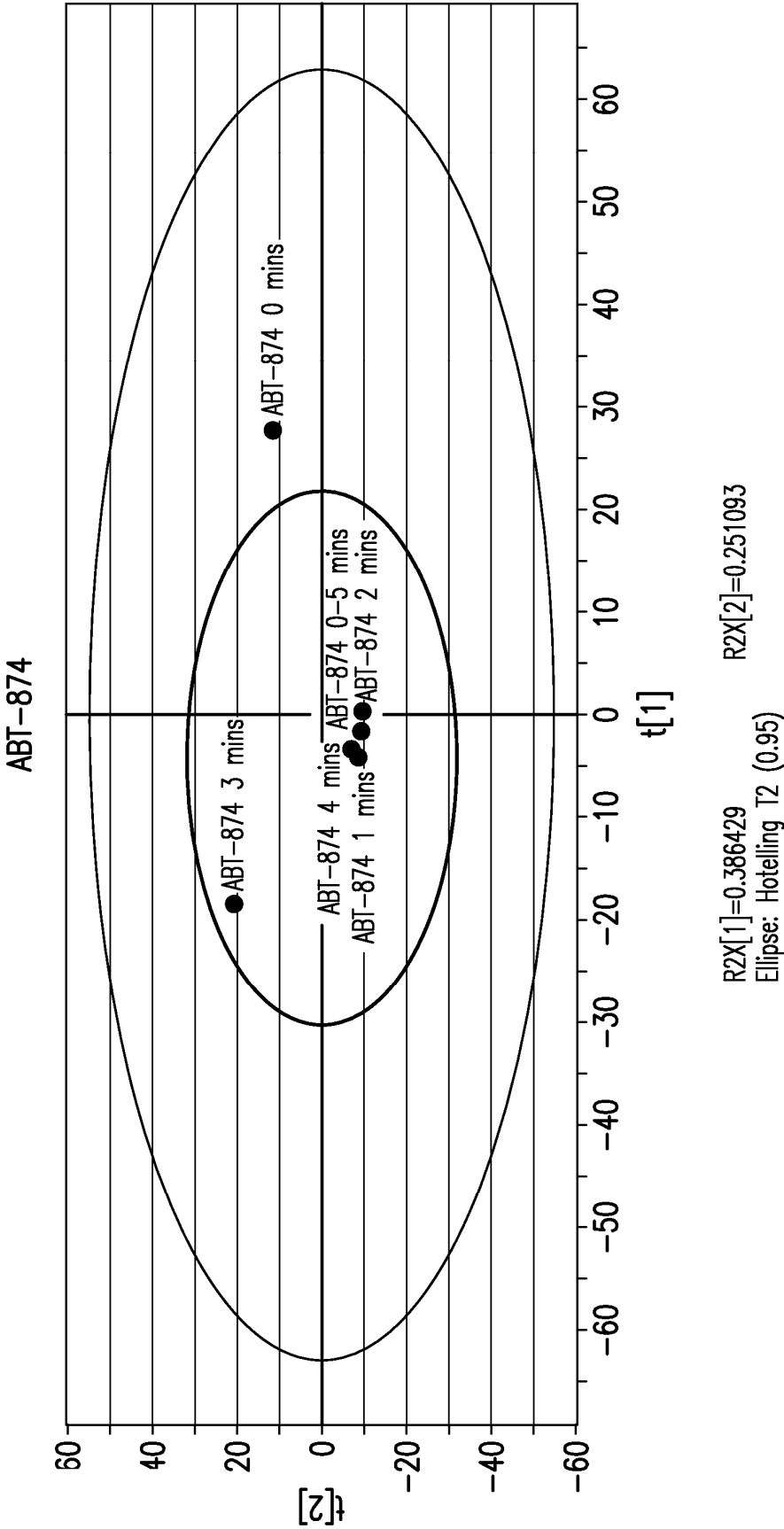


FIG. 36

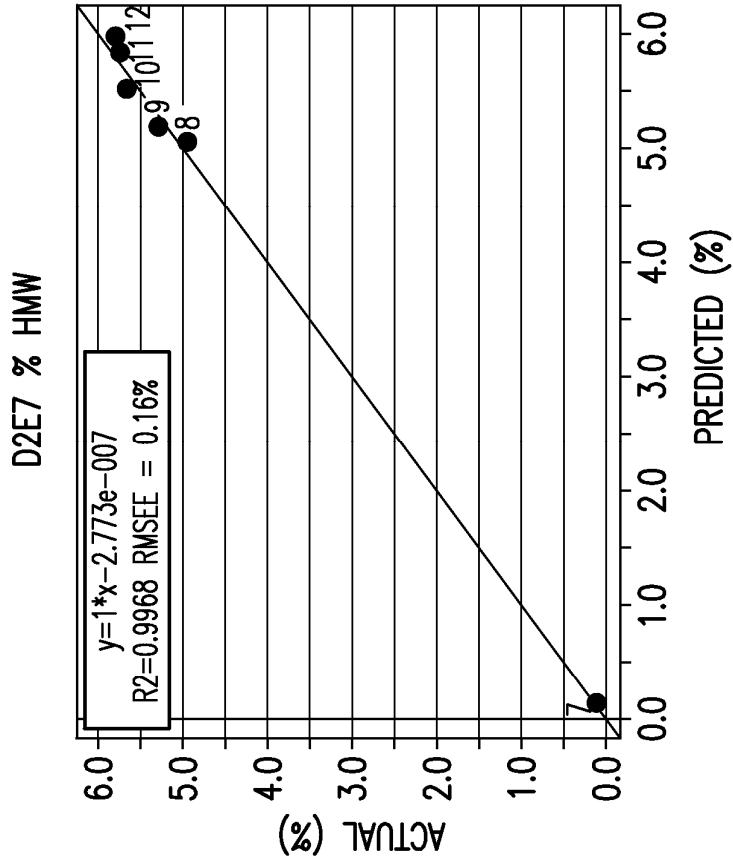


FIG. 37A

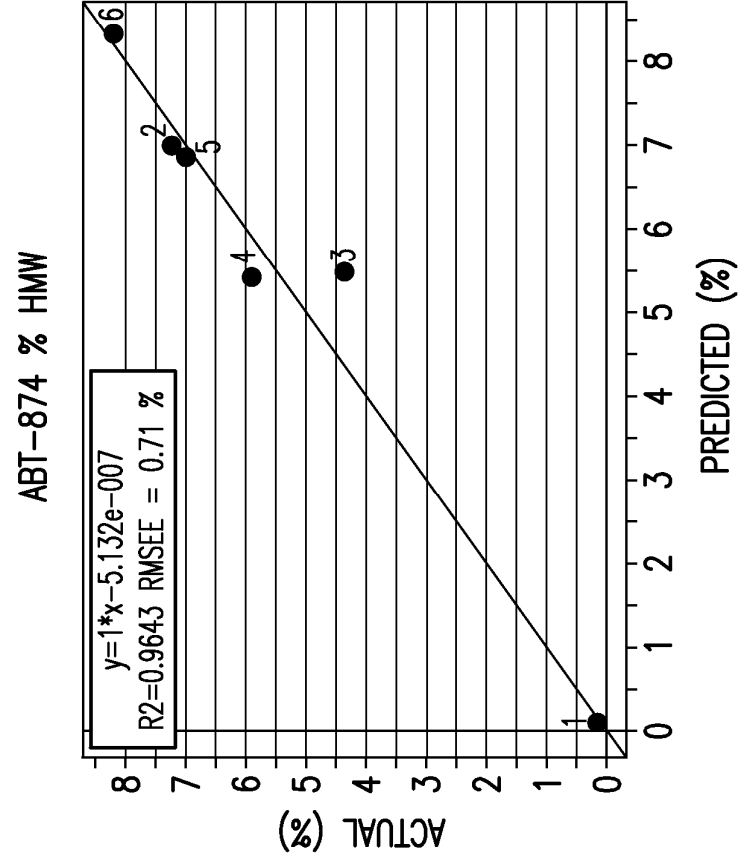


FIG. 37B