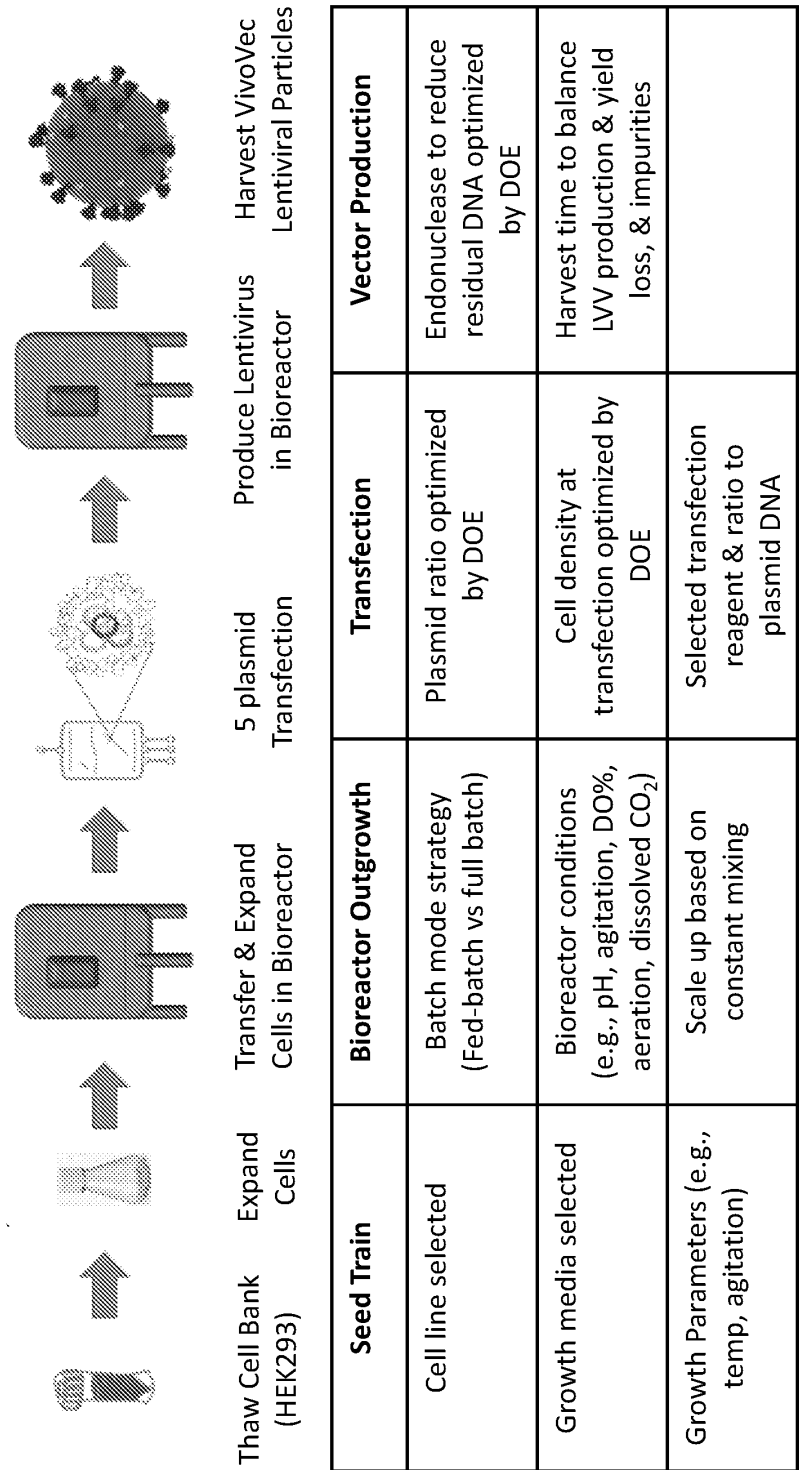




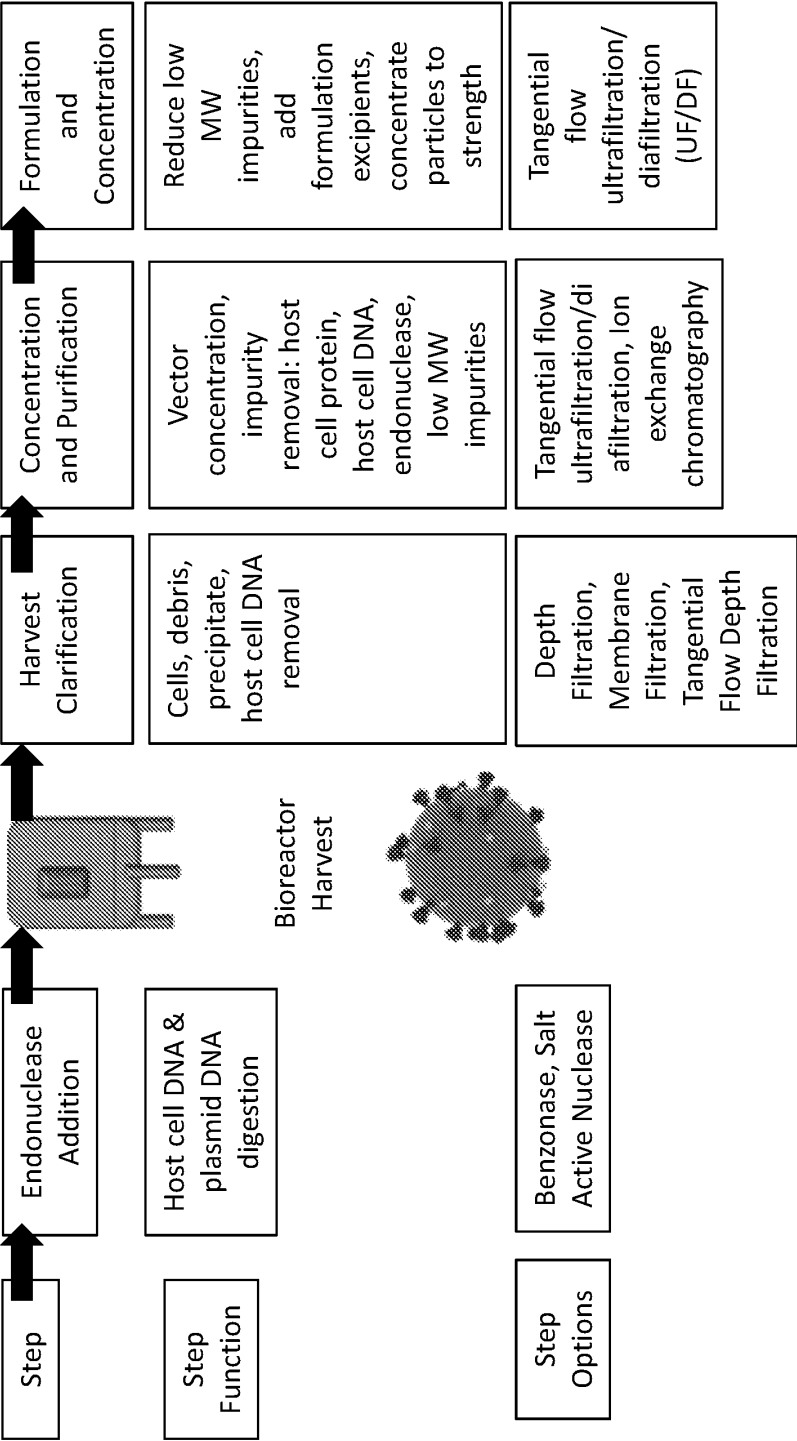


FIG. 1B

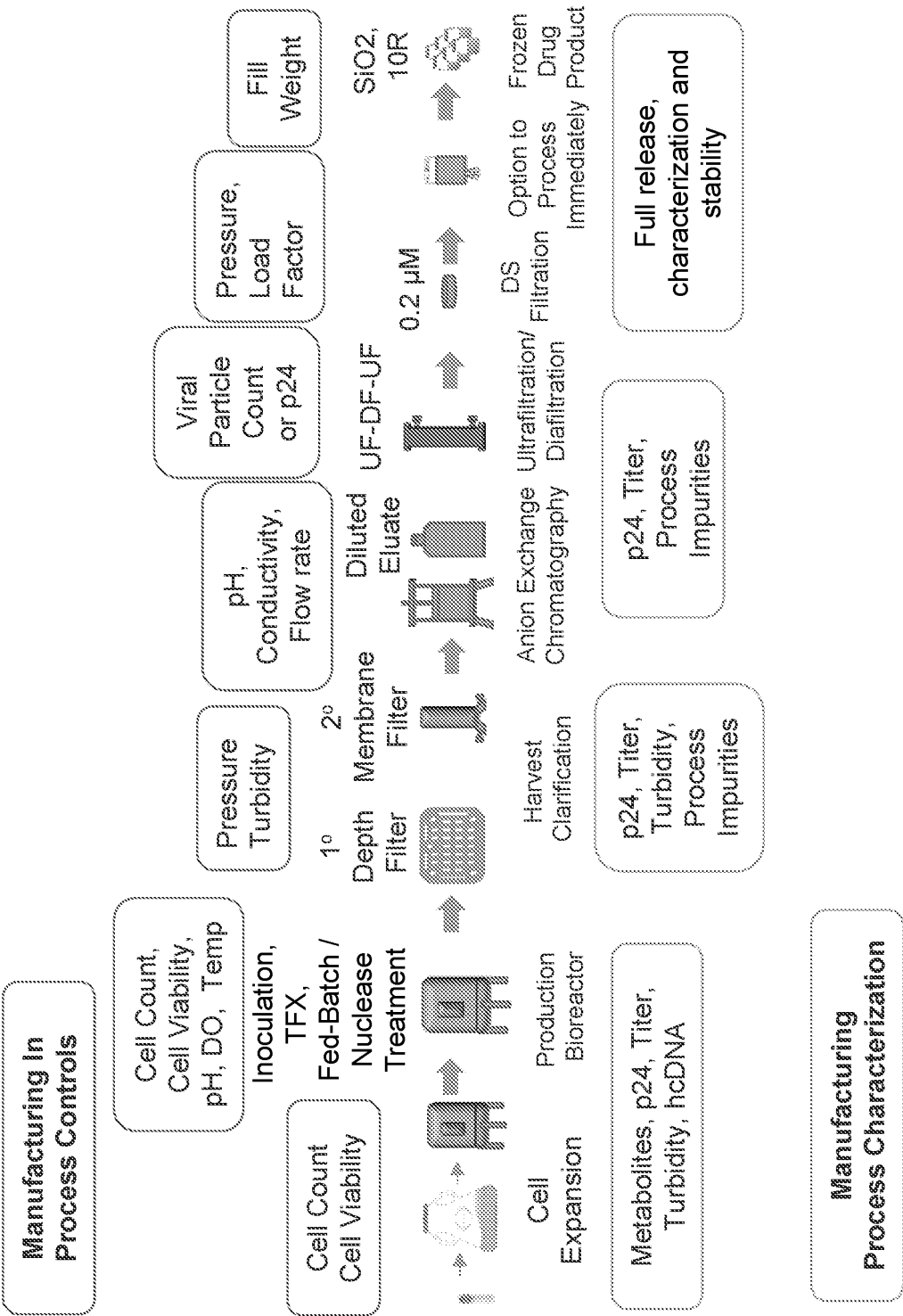


FIG. 1C

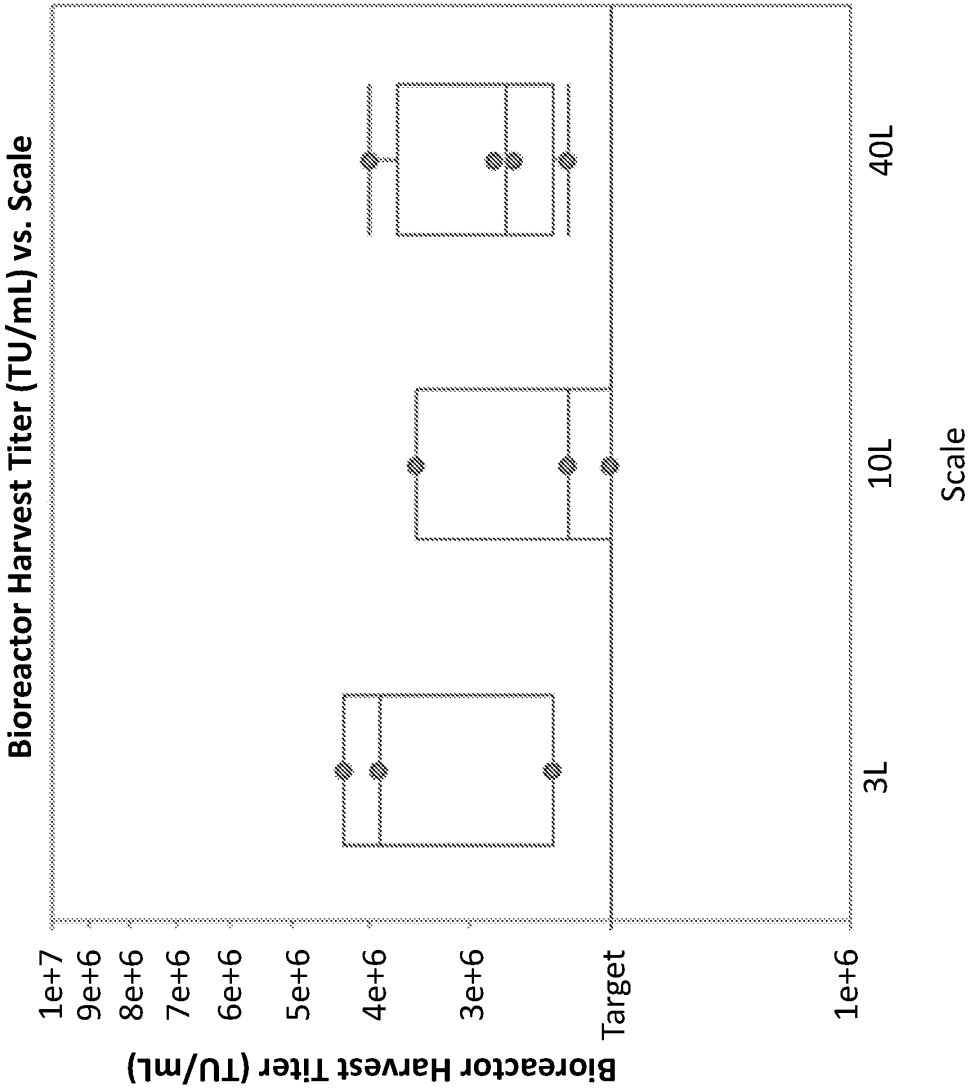


FIG. 2



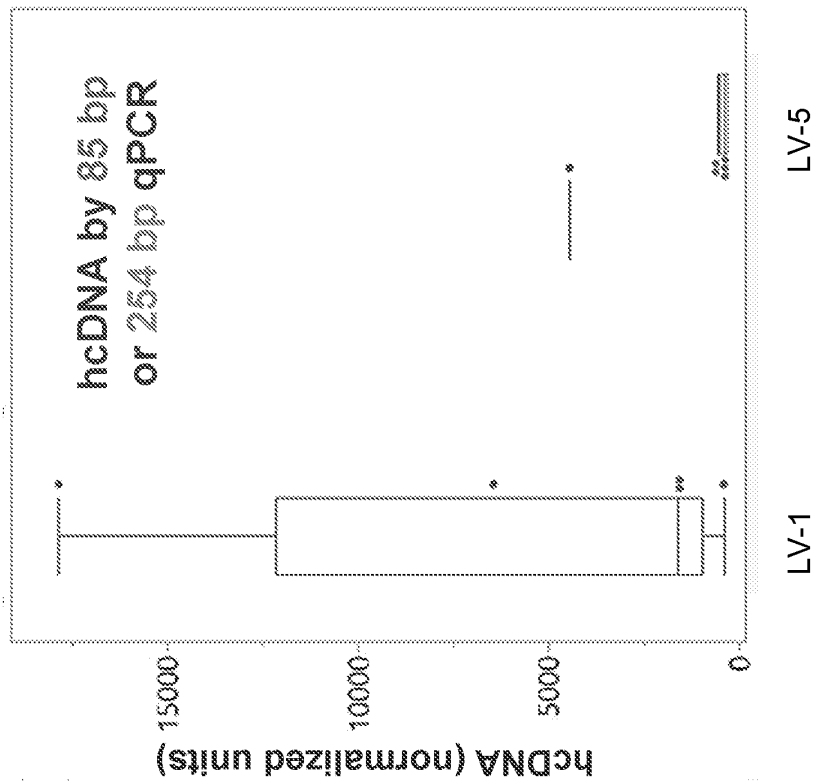


FIG. 4B

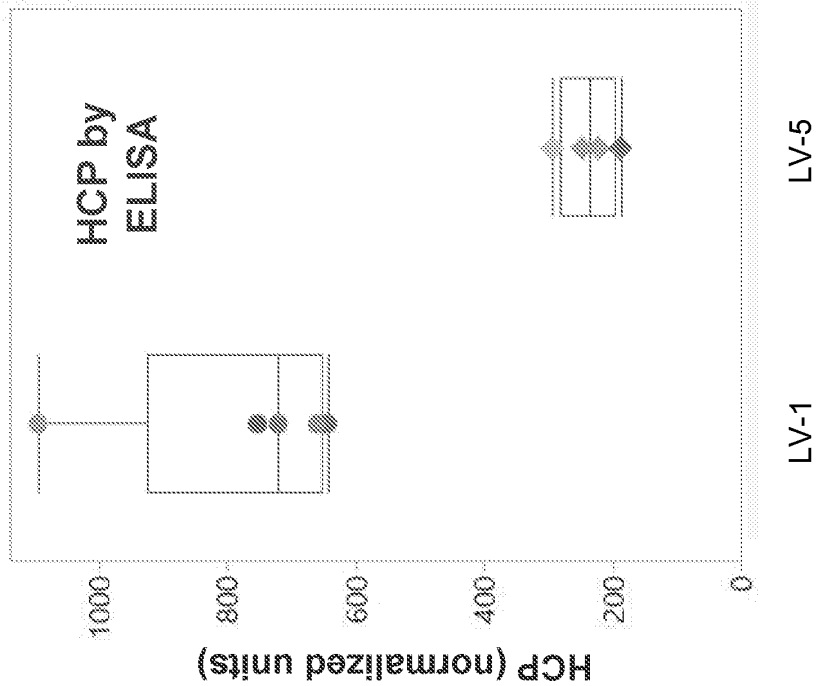


FIG. 4A

Process Number	Harvest Clarification				Chrom.	Ultrafiltration/Diafiltration			
	Harv. Vol (L)	1° Filter	2° Filter	3° Filters		+ Benz in Clar. Harv?	Chrom. Load (MVs)	TFF-A UF and DF	TFF-B Final Conc.
	9.5 - 42 L	> 1 µm Depth	0.45 µm Polish	0.2 µm Polish	No	85-230	500 kD HF	500 kD HF	0.2 µm Sterilizin g
1	20	2-4 µm	0.45 µm	0.2 µm	No	400	500 kD HF	100 kD Flat	0.2 µm
2	36	2-4 µm	0.45µm	0.45/0.2 µm	Yes	85	500 kD HF	TFF-2B Final Conc. Not Perform ed	0.2 µm
3	42	2-4 µm	0.45/0.2 µm	N/A	Yes	125	500 kD HF		0.2 µm
4	42	2-4 µm	0.45/0.2 µm	N/A	Yes	123	500 kD HF		0.2 µm
5	32	2-4 µm	0.45/0.2 µm	N/A	No	230	500 kD HF	500 kD HF	0.2 µm
6	43	8-60 µm	0.45 µm	0.45/0.2 µm	No	150	500 kD HF	500 kD HF	0.2 µm
7	40	8-60 µm	0.45 µm	0.45/0.2 µm	No	132	500 kD HF	500 kD HF	0.2 µm

FIG. 5

Volume				RDS Titer			RDS Impurities				
Process No.	Harv. Vol (L)	RDS Vol (mL)	Conc. Factor (X)	ddPCR Titer (TU/mL)	P24 Titer Ella (ng/mL)	Particles /TU	HCP (µg/1E9 TU)	hcdNA (ng/1E9 TU)	E1A DNA (copies/mL)	Benzonase (ng/mL)	Endotoxin (EU/mL)
1	20	12.5	1379	1.26E+08	7,862	780	2,949	6,647	2.08E+05	<0.31	345
2	36	64.8	480	2.65E+08	24,097	1,137	643	1,612	1.09E+05	1.47	20.4
3	42	45.0	808	1.35E+08	16,292	1,509	1,154	3,144	0.424E+05	39.3	>1000
4	42	64.5	512	4.14E+08	18,701	565	720	17,838	1.31E+05	1.90	77.2
5	32	42.6	513	2.49E+08	15,839	795	1,093	6,438	0.677E+05	TBD	6.78
6	43	52 (38)	827	TBD	24,270	TBD	1,063	2,102	TBD	TBD	85.1
7	40	73 (64)	548	TBD	TBD	TBD	TBD	TBD	TBD	TBD	14.5

FIG. 6

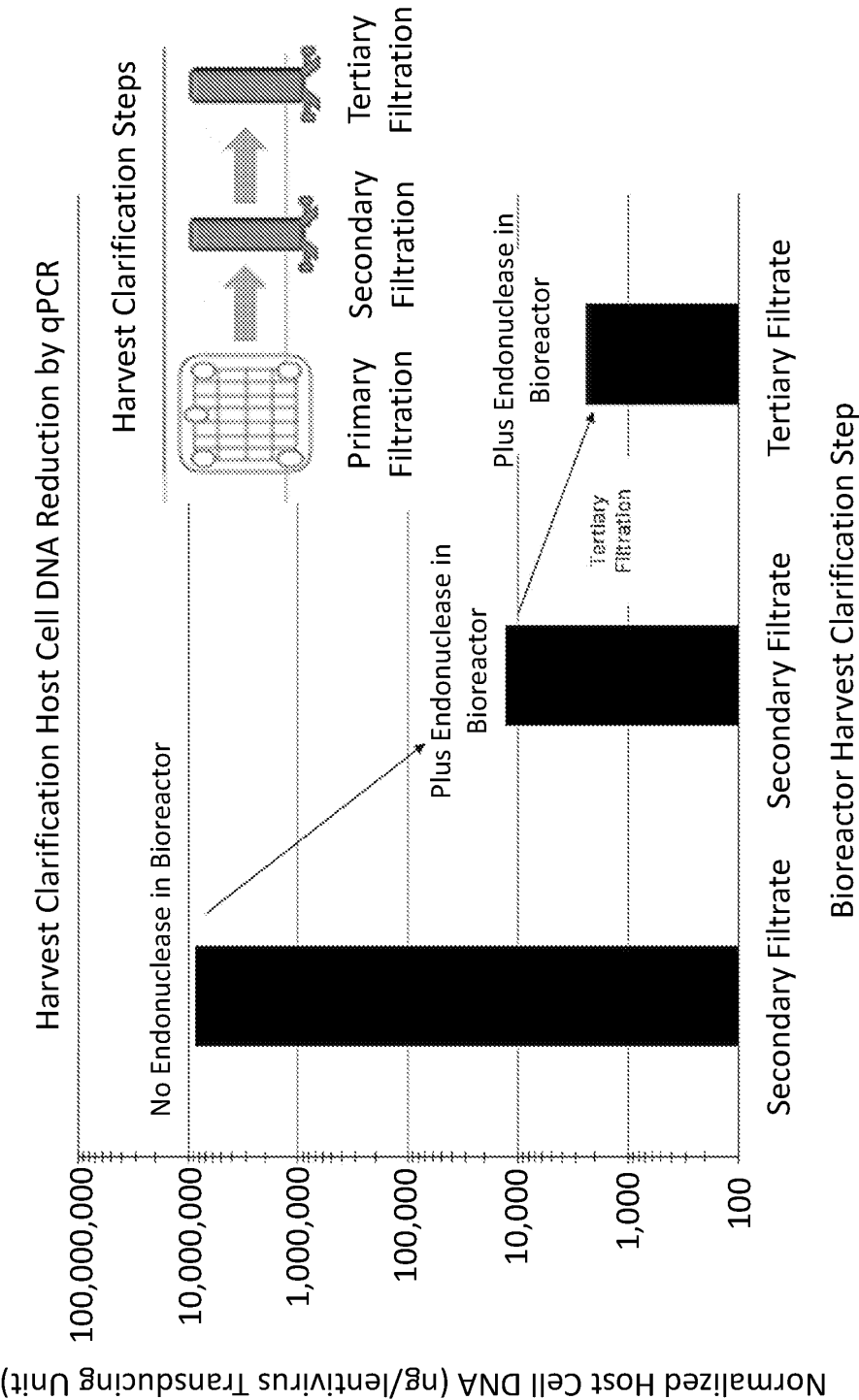


FIG. 7

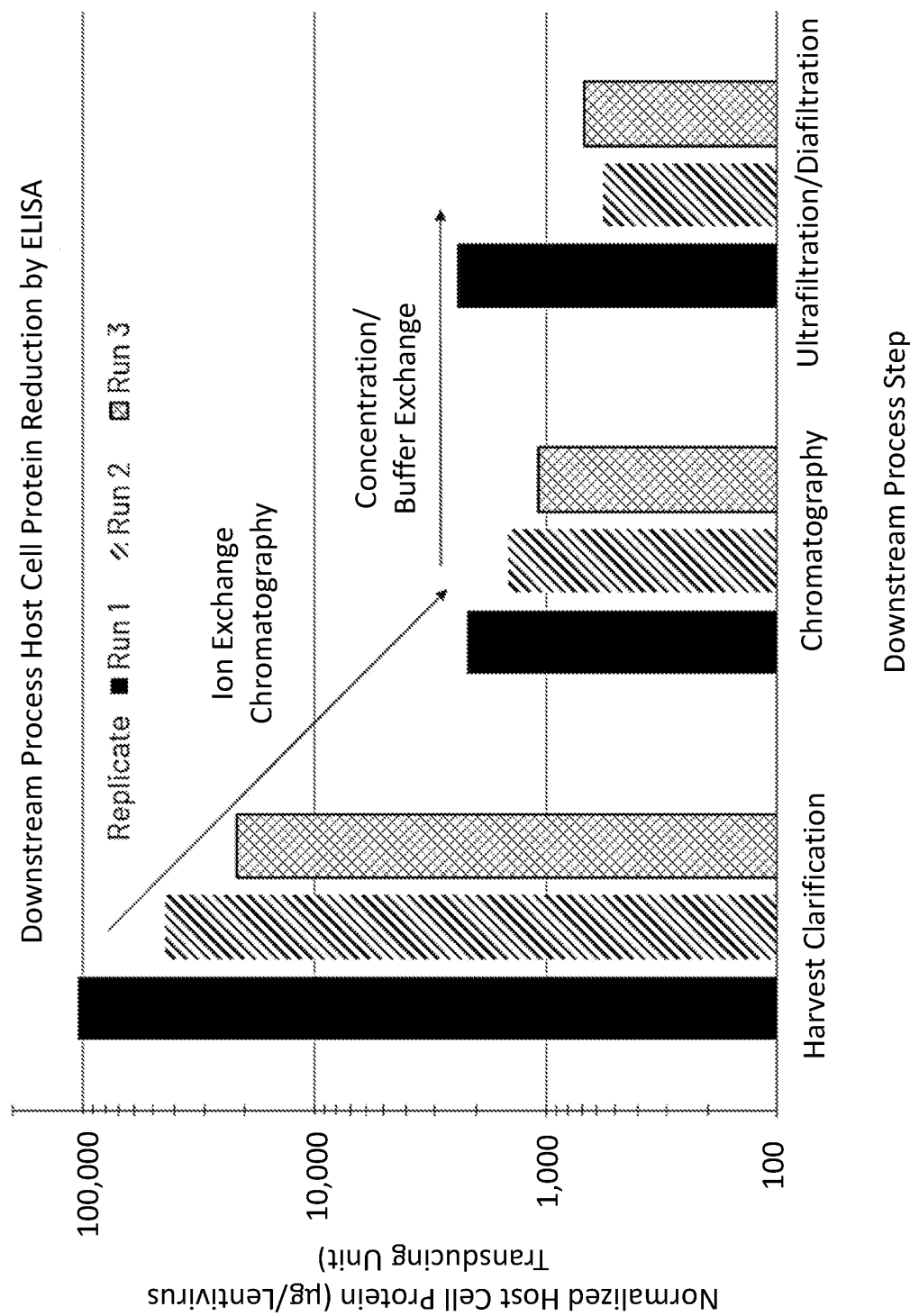


FIG. 8

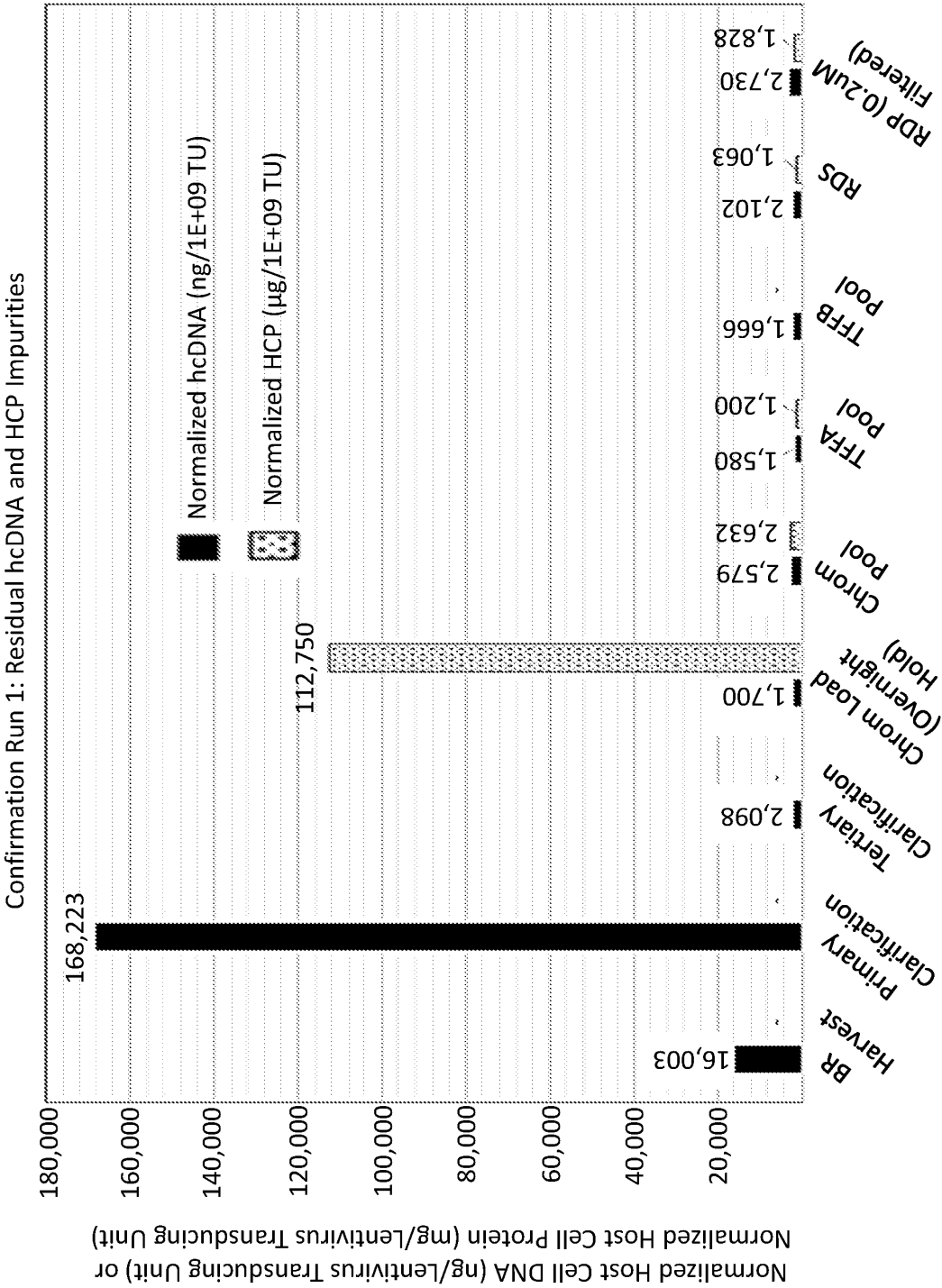


FIG. 9

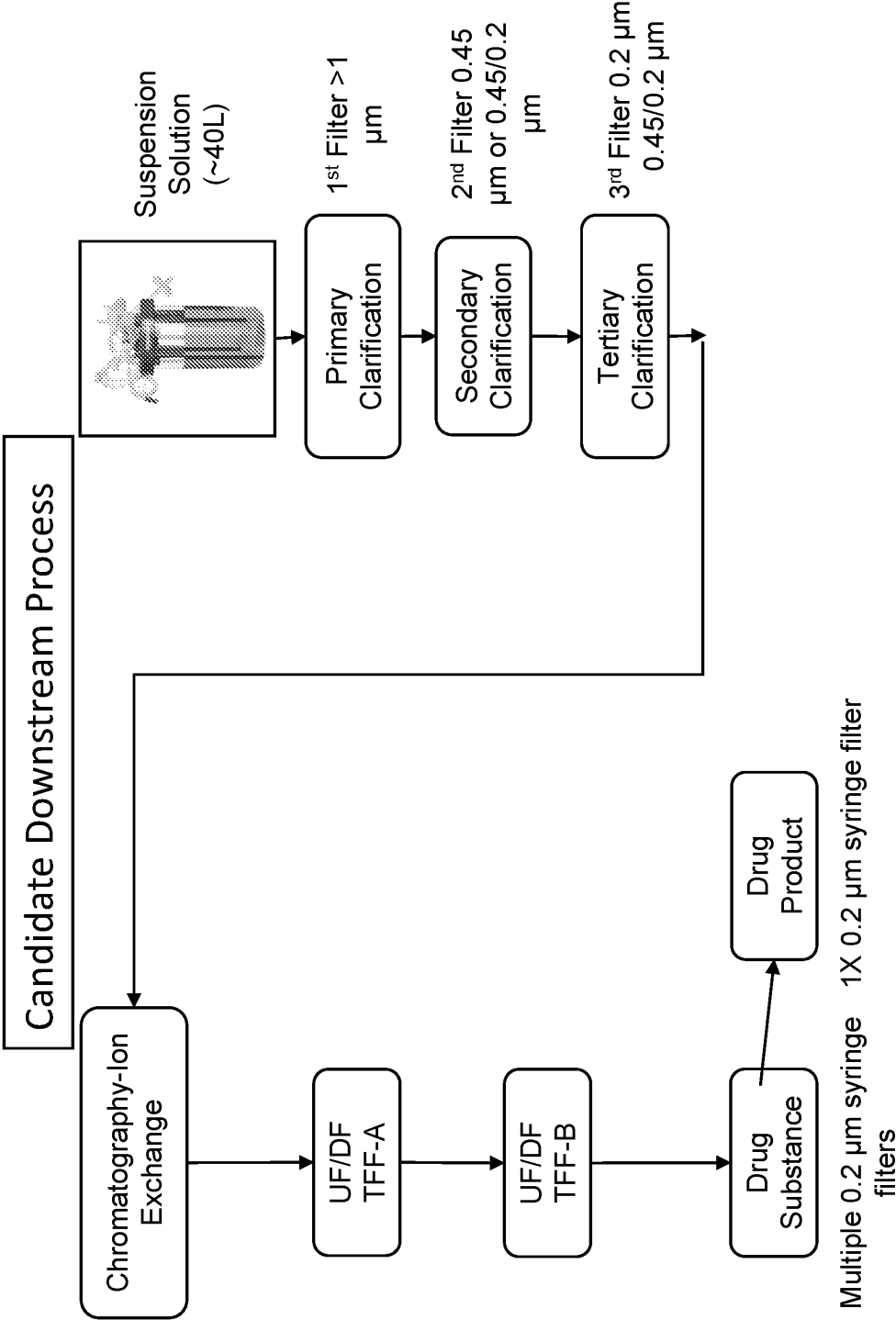


FIG. 10

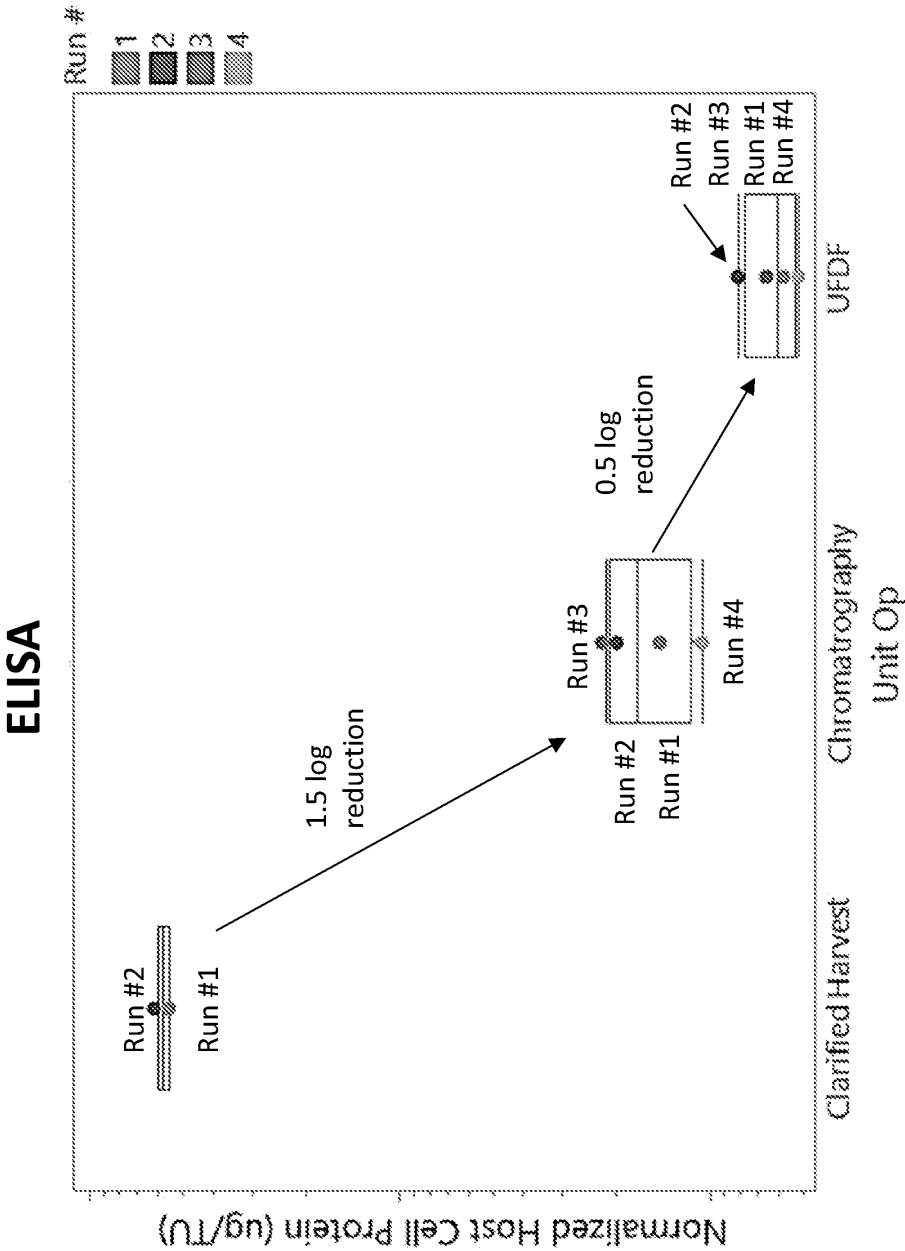


FIG. 11A

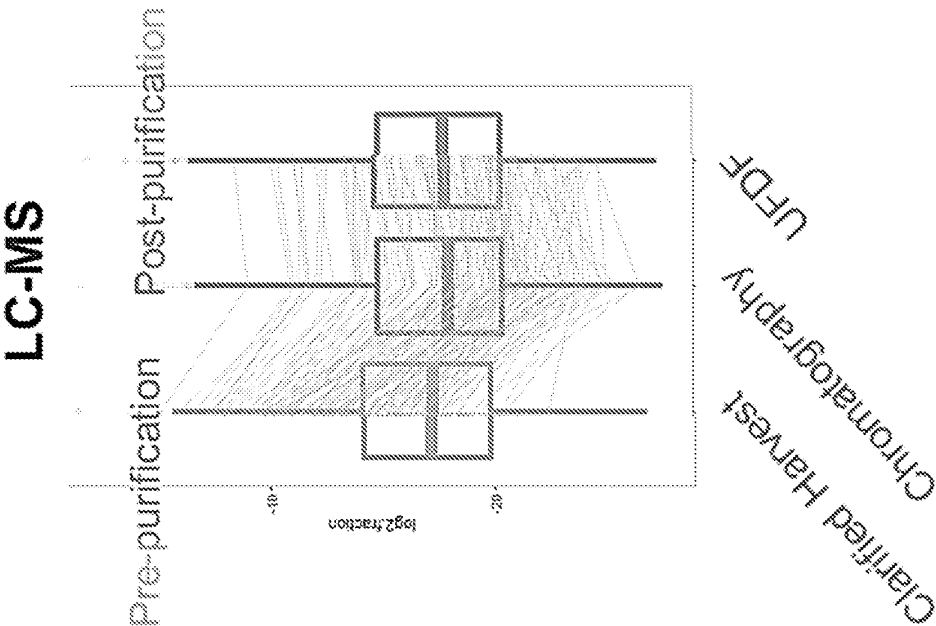
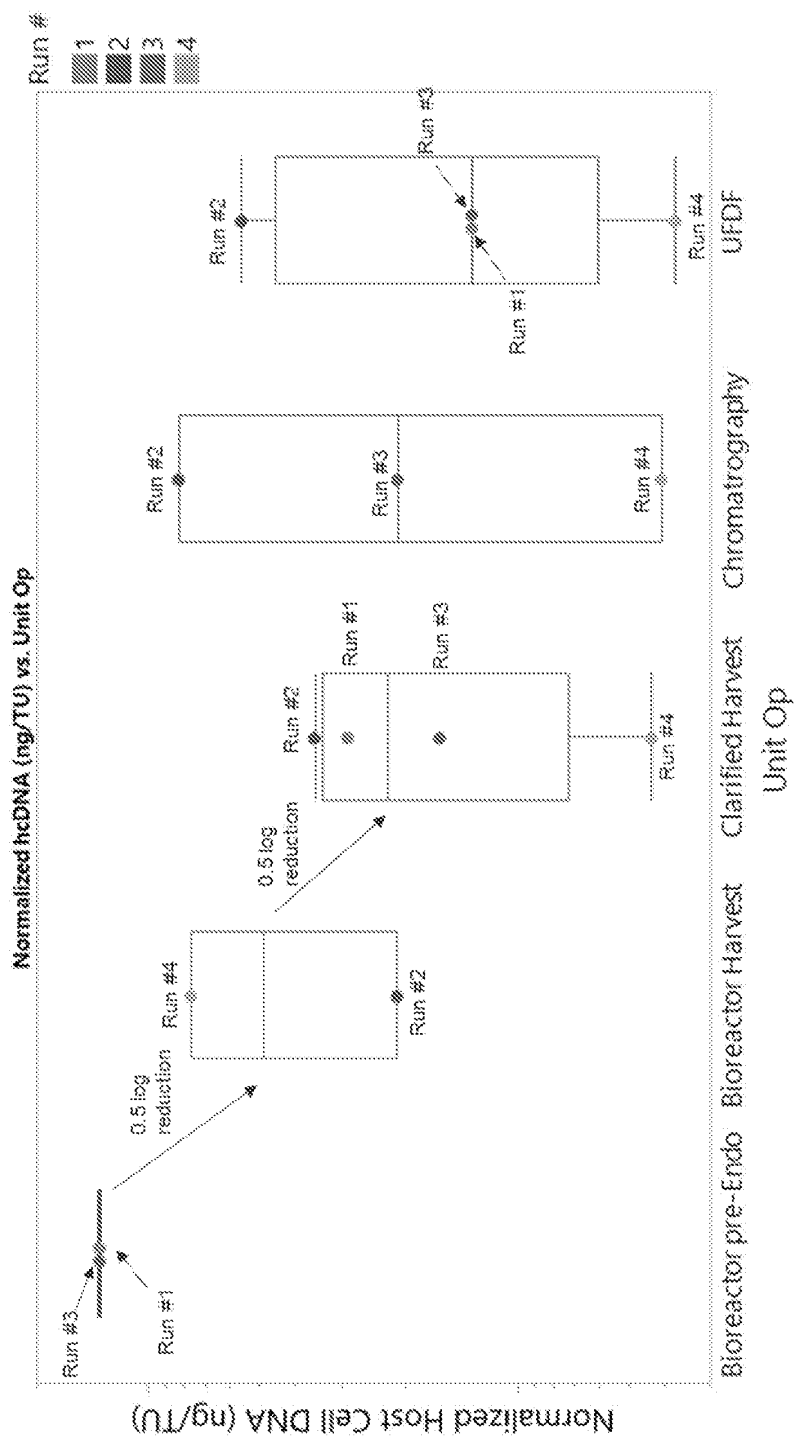


FIG. 11B



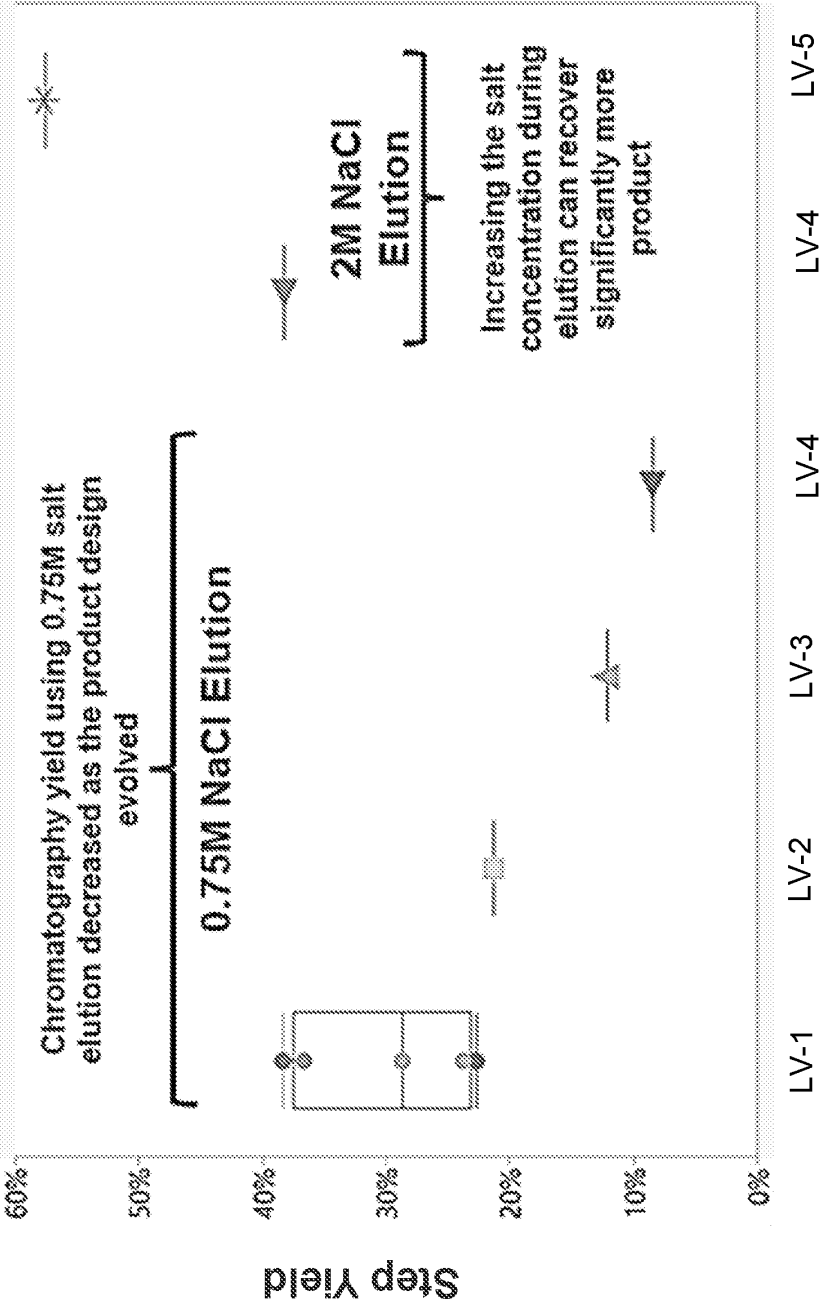


FIG. 13