

A.	Buffer																																																																																																																																																																																		
	Acetate					Citrate					Phosphate					Tris																																																																																																																																																																			
	5					5,5					6					6,5					7					7,5					8																																																																																																																																																				
	pH					5,5					6					6,5					7					7,5					8																																																																																																																																																				
	WFI					2.4354					3.8528					3.8987					3.9538					2.2074					3.4531					4.1494					3.6823					3.8078																																																																																																																																					
	Salt					0,075M NaCl					12.4209					10.9413					12.2448					12.1083					11.4935					12.6722					11.8767					12.6895					12.4738					12.2299																																																																																																																											
						0,150M NaCl					12.6594					15.5399					15.5445					15.5769					13.7035					14.5158					14.9460					14.5445					14.9714					14.3460																																																																																																																											
	Buffer															Citrate															Phosphate															Tris																																																																																																																																					
	5															5,5															6															6,5															7															7,5															8																																																																																								
	pH															5,5															6															6,5															7															7,5															8																																																																																								
WFI															5.8924															3.2181															5.0940															5.5494															5.5247															2.4383															3.9935															5.2252															4.6590															5.3210																													
Salt															0,075M NaCl															12.5243															12.0777															13.5298															13.8440															13.2556															13.8225															13.5587															13.7836															14.1860															14.1549														
															0,150M NaCl															14.6018															16.6900															16.9321															17.2249															16.1783															17.4489															16.3964															16.1161															17.1157															17.3070														
Buffer															Acetate															Citrate															Phosphate															Tris																																																																																																																							
pH															5															5,5															6															6,5															7															7,5															8																																																																										
WFI															5.0537															3.5644															5.3536															4.6533															5.7875															3.0955															3.4755															4.2573															4.1685															5.5155																													
Salt															0,075M NaCl															10.0832															8.4596															9.6702															14.4288															13.8925															13.9184															14.6633															11.3154															10.9364															11.9849														
															0,150M NaCl															12.3483															18.6254															12.8025															14.0707															10.6256															19.1272															18.9113															15.5901															13.0423															18.8333														

Figure 1

A.	Buffer		Acetate			Citrate			Phosphate			Tris		
	pH		5	5,5	5,5	5,5	6	6,5	6,5	7	7,5	7,5	8	8
	WFI		26437	13367	23440	23440	24506	24356	12919	21571	26434	21718	22712	
	Salt	0,075M NaCl	50295	49669	51317	50446	52465	54088	54646	58357	57161	58350		
		0,150M NaCl	50568	53503	55713	56575	55722	55260	57962	59339	58984	58904		
B.	Buffer		Acetate			Citrate			Phosphate			Tris		
	pH		5	5,5	5,5	5,5	6	6,5	6,5	7	7,5	7,5	8	8
	WFI		40465	35753	40225	43511	41663	27202	34534	42891	39548	39855		
	Salt	0,075M NaCl	57275	57551	60521	62271	62591	62426	64217	66973	66398	68000		
		0,150M NaCl	59290	63670	65310	65722	67343	66315	66635	68249	69651	70695		
C.	Buffer		Acetate			Citrate			Phosphate			Tris		
	pH		5	5,5	5,5	5,5	6	6,5	6,5	7	7,5	7,5	8	8
	WFI		24516	33531	48841	34806	43939	36576	19364	24194	31904	32526		
	Salt	0,075M NaCl	43285	34236	40054	60171	61256	60738	63401	51166	43535	52121		
		0,150M NaCl	44822	62754	47030	52458	43358	65018	66264	59236	48390	67718		

Figure 2

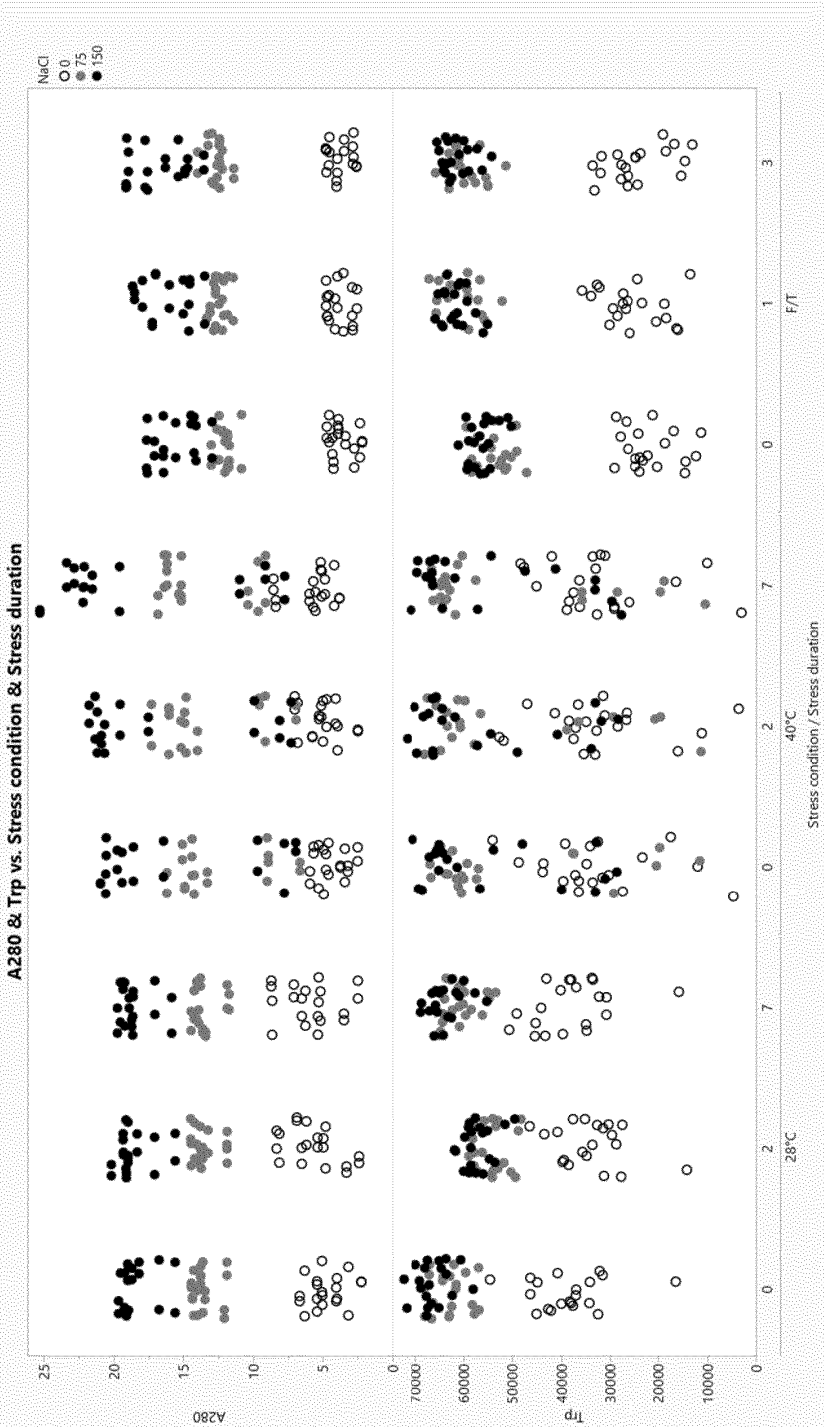


Figure 3

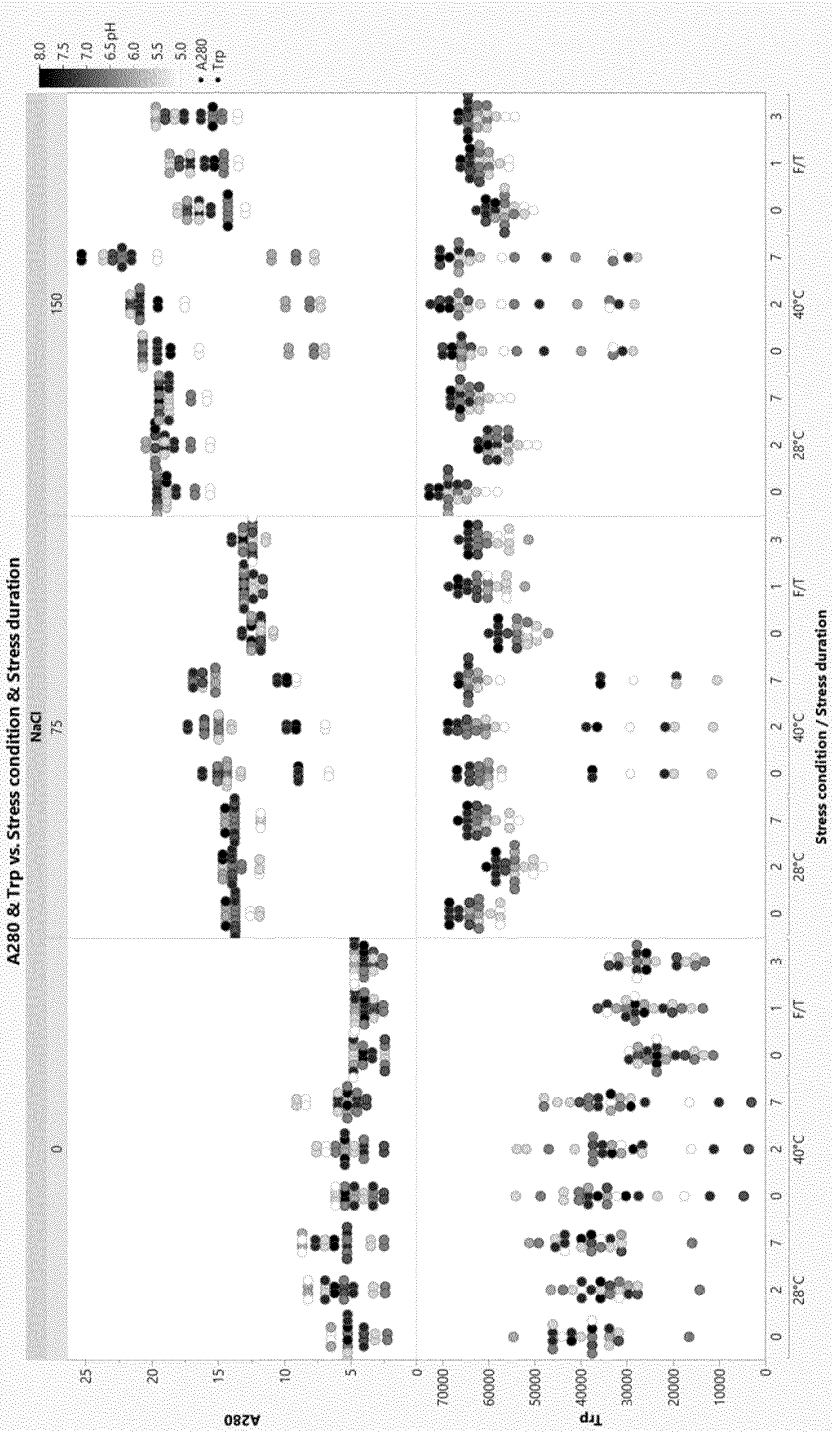


Figure 4

A.	Cysteine														Arginine			MgCl ₂		
	control		1mM	2,5mM	5mM	1mM	2,5mM	5mM	75mM	150mM	control		1mM	2,5mM	5mM	75mM	150mM			
	Phosphate pH 7,0		0.7603	0.8116	0.7939	0.9412	0.8028	0.7378	0.8082	0.8203	0.7282	Tris pH 7,5		0.8049	0.9357	1.0001	0.8335	0.8082	0.7922	0.8165
	Tris pH 8,0		0.8288	0.8892	0.9420	1.0363	0.8252	0.8218	0.8545	0.7693	0.7717									
B.	Cysteine														Arginine			MgCl ₂		
	control		1mM	2,5mM	5mM	1mM	2,5mM	5mM	75mM	150mM	control		1mM	2,5mM	5mM	75mM	150mM			
	Phosphate pH 7,0		0.7982	0.8645	0.8148	0.9626	0.8208	0.7677	0.8271	0.8403	0.7795	Tris pH 7,5		0.8308	0.9914	1.0376	0.8632	0.8263	0.8389	0.8715
	Tris pH 8,0		0.8380	0.9022	0.9495	1.0790	0.8420	0.8287	0.8791	0.7976	0.8143									
C.	Cysteine														Arginine			MgCl ₂		
	control		1mM	2,5mM	5mM	1mM	2,5mM	5mM	75mM	150mM	control		1mM	2,5mM	5mM	75mM	150mM			
	Phosphate pH 7,0		0.7759	0.8332	0.8245	0.9535	0.8134	0.7574	0.8131	0.8594	0.7522	Tris pH 7,5		0.8027	0.9434	1.0094	0.8366	0.8075	0.8154	0.8469
	Tris pH 8,0		0.8085	0.8816	0.9630	1.0514	0.8148	0.8215	0.8559	0.7806	0.8115									
D.	Cysteine														Arginine			MgCl ₂		
	control		1mM	2,5mM	5mM	1mM	2,5mM	5mM	75mM	150mM	control		1mM	2,5mM	5mM	75mM	150mM			
	Phosphate pH 7,0		0.8273	0.9460	0.8327	0.9771	0.8196	0.7605	0.8102	0.8385	0.7479	Tris pH 7,5		0.8172	0.9860	1.0319	0.8402	0.8037	0.8278	0.8490
	Tris pH 8,0		1.0412	0.9186	0.9685	1.0730	0.8349	0.8277	0.8895	0.8131	0.7933									

Figure 5

	Cysteine				Arginine				MgCl ₂			
	control	1mM	2,5mM	5mM	1mM	2,5mM	5mM	150mM	control	1mM	2,5mM	5mM
Phosphate pH 7,0	24726	25646	17975	25281	27492	21699	29380	21329				
Tris pH 7,5	29237	29933	32192	26040	30810	33621	28926	32155				
Tris pH 8,0	34236	31448	32422	35181	32898	31666	35830	27242				
	Cysteine				Arginine				MgCl ₂			
	control	1mM	2,5mM	5mM	1mM	2,5mM	5mM	150mM	control	1mM	2,5mM	5mM
Phosphate pH 7,0	17618	17200	12603	17254	18644	15610	19508	15666				
Tris pH 7,5	18797	18989	19945	18496	19682	20105	17498	22042				
Tris pH 8,0	20107	18308	19202	21796	19695	18889	21096	18658				
	Cysteine				Arginine				MgCl ₂			
	control	1mM	2,5mM	5mM	1mM	2,5mM	5mM	150mM	control	1mM	2,5mM	5mM
Phosphate pH 7,0	24936	25350	18569	24854	26504	21948	29820	21800				
Tris pH 7,5	29250	29759	33037	27309	30409	34395	30557	32242				
Tris pH 8,0	34005	32903	32701	34815	32593	32005	37265	27808				
	Cysteine				Arginine				MgCl ₂			
	control	1mM	2,5mM	5mM	1mM	2,5mM	5mM	150mM	control	1mM	2,5mM	5mM
Phosphate pH 7,0	23577	25349	18627	25182	27566	21837	29163	21589				
Tris pH 7,5	28857	29321	32024	26838	30456	33346	28590	31900				
Tris pH 8,0	33559	31525	31656	35548	32980	31623	36188	27076				

Figure 6

A		4% Mannitol	4% Maltose	4% HPBCD	4% Trehalose	2% HPBCD + 2% Trehalose	2% Mannitol	2% Maltose	2% HPBCD	2% Trehalose	1% HPBCD + 1% Trehalose
	20mM Tris pH 7.5	2.6050	2.7712	2.4784	2.5517	2.7933	1.9471	2.5846	2.5489	1.6552	1.6424
	20mM Tris pH 7.5 + 2.5mM glycine	2.4324	2.6684	2.9506	2.7410	2.8269	2.8317	2.6137	2.7751	2.7347	1.2076
	20mM Tris pH 7.5 + 2.5mM histidine	2.7690	2.5428	2.8440	2.7623	2.8029	2.5722	2.7164	2.7093	2.6065	1.7945
B		4% Mannitol	4% Maltose	4% HPBCD	4% Trehalose	2% HPBCD + 2% Trehalose	2% Mannitol	2% Maltose	2% HPBCD	2% Trehalose	1% HPBCD + 1% Trehalose
	20mM Tris pH 7.5	2.5104	2.5785	2.3785	2.4560	2.6731	2.3558	2.5026	2.4741	2.3627	2.3585
	20mM Tris pH 7.5 + 2.5mM glycine	2.3373	2.5653	2.8529	2.5992	2.7291	2.7139	2.5122	2.6881	2.5854	
	20mM Tris pH 7.5 + 2.5mM histidine	2.6416	2.4615	2.7543	2.6389	2.7073	2.4552	2.5931	2.6020	2.5069	1.9233
C		4% Mannitol	4% Maltose	4% HPBCD	4% Trehalose	2% HPBCD + 2% Trehalose	2% Mannitol	2% Maltose	2% HPBCD	2% Trehalose	1% HPBCD + 1% Trehalose
	20mM Tris pH 7.5	2.5745	2.6242	2.4647	2.5121	2.7492	2.5805	2.5743	2.5139	2.4175	1.5811
	20mM Tris pH 7.5 + 2.5mM glycine	2.3627	2.6534	2.9257	2.6917	2.8237	2.8109	2.5971	2.7709	2.6667	1.5988
	20mM Tris pH 7.5 + 2.5mM histidine	2.6736	2.5098	2.8190	2.7216	2.7734	2.5425	2.6650	2.6903	2.5522	1.7604
D		4% Mannitol	4% Maltose	4% HPBCD	4% Trehalose	2% HPBCD + 2% Trehalose	2% Mannitol	2% Maltose	2% HPBCD	2% Trehalose	1% HPBCD + 1% Trehalose
	20mM Tris pH 7.5	2.5010	2.6863	2.3798	2.4743	2.7116	1.8430	2.5000	2.4755	1.5836	1.5669
	20mM Tris pH 7.5 + 2.5mM glycine	2.3317	2.5854	2.8983	2.6586	2.7739	2.7685	2.5243	2.7108	2.6683	1.1553
	20mM Tris pH 7.5 + 2.5mM histidine	2.6860	2.4642	2.7512	2.7108	2.7163	2.5000	2.6391	2.6456	2.5313	1.7279

Figure 7

A.		4% Mannitol	4% Maltose	4% HPBCD	4% Trehalose	2% HPBCD + 2% Trehalose	2% Mannitol	2% Maltose	2% HPBCD	2% Trehalose	1% HPBCD + 1% Trehalose
	20mM Tris pH 7.5	21656	22941	19769	21293	23089	14825	21493	20684	11458	11466
	20mM Tris pH 7.5 + 2.5mM Glycine	19756	21681	23006	22707	23073	23613	21253	22350	22035	6655
	20mM Tris pH 7.5 + 2.5mM histidine	22532	20280	22587	22840	22467	21027	21559	21050	20565	12912
B.		4% Mannitol	4% Maltose	4% HPBCD	4% Trehalose	2% HPBCD + 2% Trehalose	2% Mannitol	2% Maltose	2% HPBCD	2% Trehalose	1% HPBCD + 1% Trehalose
	20mM Tris pH 7.5	20465	20853	18236	20001	21256	9552	20165	18886	9535	6774
	20mM Tris pH 7.5 + 2.5mM glycine	18329	20329	21747	21168	21170	21845	19880	20413	20296	363
	20mM Tris pH 7.5 + 2.5mM histidine	20905	19064	20762	20840	20698	19275	20003	19368	18804	10648
C.		4% Mannitol	4% Maltose	4% HPBCD	4% Trehalose	2% HPBCD + 2% Trehalose	2% Mannitol	2% Maltose	2% HPBCD	2% Trehalose	1% HPBCD + 1% Trehalose
	20mM Tris pH 7.5	21054	21203	18884	20826	22004	12469	20859	19824	9935	10856
	20mM Tris pH 7.5 + 2.5mM glycine	19146	20972	22641	21985	21981	22846	20707	21298	21128	5510
	20mM Tris pH 7.5 + 2.5mM histidine	21709	19690	21626	21701	21450	20031	20916	20017	19541	12089
D.		4% Mannitol	4% Maltose	4% HPBCD	4% Trehalose	2% HPBCD + 2% Trehalose	2% Mannitol	2% Maltose	2% HPBCD	2% Trehalose	1% HPBCD + 1% Trehalose
	20mM Tris pH 7.5	19919	21099	17774	19691	20986	13430	19843	18689	10394	10158
	20mM Tris pH 7.5 + 2.5mM glycine	18090	19721	21360	20549	20602	21439	19490	19940	20325	5801
	20mM Tris pH 7.5 + 2.5mM histidine	20576	18335	20181	20479	19858	18596	19613	18839	18473	11172

Figure 8

A	PBS pH: 7 +5% sucrose control	0.05% Mannitol in TH(+)	0.1% Mannitol in TH(+)	0.5% Mannitol in TH(+)	1% Mannitol in TH(+)	2% Mannitol in TH(+)	0.01% HPBCD in TH(+)	0.1% HPBCD in TH(+)	1% HPBCD in TH(+)	2% HPBCD in TH(+)	4% HPBCD in TH(+)
		3.3987	3.8182	3.3162	3.7660	3.8878	3.3097	4.0215	4.1977	3.4645	4.0535
		3.8749	4.0768	4.1829	4.2097	4.0802	4.0980	3.9938	4.1006	4.1879	4.2047
		0.05% Mannitol + 0.01% HPBCD in TH(+)	0.1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	1% Mannitol + 2% HPBCD in TH(+)	2% Mannitol + 4% HPBCD in TH(+)	2% Mannitol + 0.01% HPBCD in TH(+)	1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	0.1% Mannitol + 2% HPBCD in TH(+)	0.05% Mannitol + 4% HPBCD in TH(+)
	TH(+) buffer control										
B	PBS pH: 7 +5% sucrose control	0.05% Mannitol in TH(+)	0.1% Mannitol in TH(+)	0.5% Mannitol in TH(+)	1% Mannitol in TH(+)	2% Mannitol in TH(+)	0.01% HPBCD in TH(+)	0.1% HPBCD in TH(+)	1% HPBCD in TH(+)	2% HPBCD in TH(+)	4% HPBCD in TH(+)
		3.8368	3.9177	3.3087	3.8052	3.9081	3.8095	4.1481	4.3422	3.4138	4.2230
		4.2733	4.1866	4.1257	3.8563	3.9443	3.8826	4.1077	4.0408	4.1212	4.1166
		0.05% Mannitol + 0.01% HPBCD in TH(+)	0.1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	1% Mannitol + 2% HPBCD in TH(+)	2% Mannitol + 4% HPBCD in TH(+)	2% Mannitol + 0.01% HPBCD in TH(+)	1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	0.1% Mannitol + 2% HPBCD in TH(+)	0.05% Mannitol + 4% HPBCD in TH(+)
	TH(+) buffer control										
C	PBS pH: 7 +5% sucrose control	0.05% Mannitol in TH(+)	0.1% Mannitol in TH(+)	0.5% Mannitol in TH(+)	1% Mannitol in TH(+)	2% Mannitol in TH(+)	0.01% HPBCD in TH(+)	0.1% HPBCD in TH(+)	1% HPBCD in TH(+)	2% HPBCD in TH(+)	4% HPBCD in TH(+)
		4.4157	3.8500	3.7612	3.9146	3.8139	3.7871	4.0501	4.1797	3.7459	4.1391
		4.2599	4.0801	4.0005	3.9033	3.8287	3.7190	3.9982	3.9068	4.0214	4.0563
		0.05% Mannitol + 0.01% HPBCD in TH(+)	0.1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	1% Mannitol + 2% HPBCD in TH(+)	2% Mannitol + 4% HPBCD in TH(+)	2% Mannitol + 0.01% HPBCD in TH(+)	1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	0.1% Mannitol + 2% HPBCD in TH(+)	0.05% Mannitol + 4% HPBCD in TH(+)
	TH(+) buffer control										
D	PBS pH: 7 +5% sucrose control	0.05% Mannitol in TH(+)	0.1% Mannitol in TH(+)	0.5% Mannitol in TH(+)	1% Mannitol in TH(+)	2% Mannitol in TH(+)	0.01% HPBCD in TH(+)	0.1% HPBCD in TH(+)	1% HPBCD in TH(+)	2% HPBCD in TH(+)	4% HPBCD in TH(+)
		3.8298	3.7849	3.2748	3.8053	3.8757	3.7606	4.1066	4.2851	3.3611	4.2044
		4.2498	4.0598	4.0777	3.7914	3.8857	3.8526	4.0745	4.0144	4.1132	4.1084
		0.05% Mannitol + 0.01% HPBCD in TH(+)	0.1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	1% Mannitol + 2% HPBCD in TH(+)	2% Mannitol + 4% HPBCD in TH(+)	2% Mannitol + 0.01% HPBCD in TH(+)	1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	0.1% Mannitol + 2% HPBCD in TH(+)	0.05% Mannitol + 4% HPBCD in TH(+)
	TH(+) buffer control										

Figure 9

A	PBS pH: 7 +5% sucrose control	0.05% Mannitol in TH(+)	0.1% Mannitol in TH(+)	0.5% Mannitol in TH(+)	1% Mannitol in TH(+)	2% Mannitol in TH(+)	0.01% HPBCD in TH(+)	0.1% HPBCD in TH(+)	1% HPBCD in TH(+)	2% HPBCD in TH(+)	4% HPBCD in TH(+)
	18654	29562	29437	23334	28994	30318	25905	31107	31266	22696	29619
	29082	29201	30889	32031	31528	30978	31781	30914	30656	31890	31826
	TH(+): buffer control	0.05% Mannitol + 0.01% HPBCD in TH(+)	0.1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	1% Mannitol + 2% HPBCD in TH(+)	2% Mannitol + 4% HPBCD in TH(+)	2% Mannitol + 0.01% HPBCD in TH(+)	1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	0.1% Mannitol + 2% HPBCD in TH(+)	0.05% Mannitol + 4% HPBCD in TH(+)
B	PBS pH: 7 +5% sucrose control	0.05% Mannitol in TH(+)	0.1% Mannitol in TH(+)	0.5% Mannitol in TH(+)	1% Mannitol in TH(+)	2% Mannitol in TH(+)	0.01% HPBCD in TH(+)	0.1% HPBCD in TH(+)	1% HPBCD in TH(+)	2% HPBCD in TH(+)	4% HPBCD in TH(+)
	24948	27724	28526	22333	28062	28712	27817	30467	31465	22426	29542
	30619	28921	30246	30099	27883	28489	27839	29396	29019	29510	29001
	TH(+): buffer control	0.05% Mannitol + 0.01% HPBCD in TH(+)	0.1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	1% Mannitol + 2% HPBCD in TH(+)	2% Mannitol + 4% HPBCD in TH(+)	2% Mannitol + 0.01% HPBCD in TH(+)	1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	0.1% Mannitol + 2% HPBCD in TH(+)	0.05% Mannitol + 4% HPBCD in TH(+)
C	PBS pH: 7 +5% sucrose control	0.05% Mannitol in TH(+)	0.1% Mannitol in TH(+)	0.5% Mannitol in TH(+)	1% Mannitol in TH(+)	2% Mannitol in TH(+)	0.01% HPBCD in TH(+)	0.1% HPBCD in TH(+)	1% HPBCD in TH(+)	2% HPBCD in TH(+)	4% HPBCD in TH(+)
	23059	29483	30232	21866	27919	29909	28058	31576	33298	22560	30165
	31465	31134	31853	31801	27558	29427	29983	30965	30901	31098	29891
	TH(+): buffer control	0.05% Mannitol + 0.01% HPBCD in TH(+)	0.1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	1% Mannitol + 2% HPBCD in TH(+)	2% Mannitol + 4% HPBCD in TH(+)	2% Mannitol + 0.01% HPBCD in TH(+)	1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	0.1% Mannitol + 2% HPBCD in TH(+)	0.05% Mannitol + 4% HPBCD in TH(+)
D	PBS pH: 7 +5% sucrose control	0.05% Mannitol in TH(+)	0.1% Mannitol in TH(+)	0.5% Mannitol in TH(+)	1% Mannitol in TH(+)	2% Mannitol in TH(+)	0.01% HPBCD in TH(+)	0.1% HPBCD in TH(+)	1% HPBCD in TH(+)	2% HPBCD in TH(+)	4% HPBCD in TH(+)
	25683	28576	29330	23007	28872	29524	28205	30638	31408	22306	29359
	31014	29477	30551	30230	28009	28395	28481	29842	29531	30027	29350
	TH(+): buffer control	0.05% Mannitol + 0.01% HPBCD in TH(+)	0.1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	1% Mannitol + 2% HPBCD in TH(+)	2% Mannitol + 4% HPBCD in TH(+)	2% Mannitol + 0.01% HPBCD in TH(+)	1% Mannitol + 0.1% HPBCD in TH(+)	0.5% Mannitol + 1% HPBCD in TH(+)	0.1% Mannitol + 2% HPBCD in TH(+)	0.05% Mannitol + 4% HPBCD in TH(+)

Figure 10

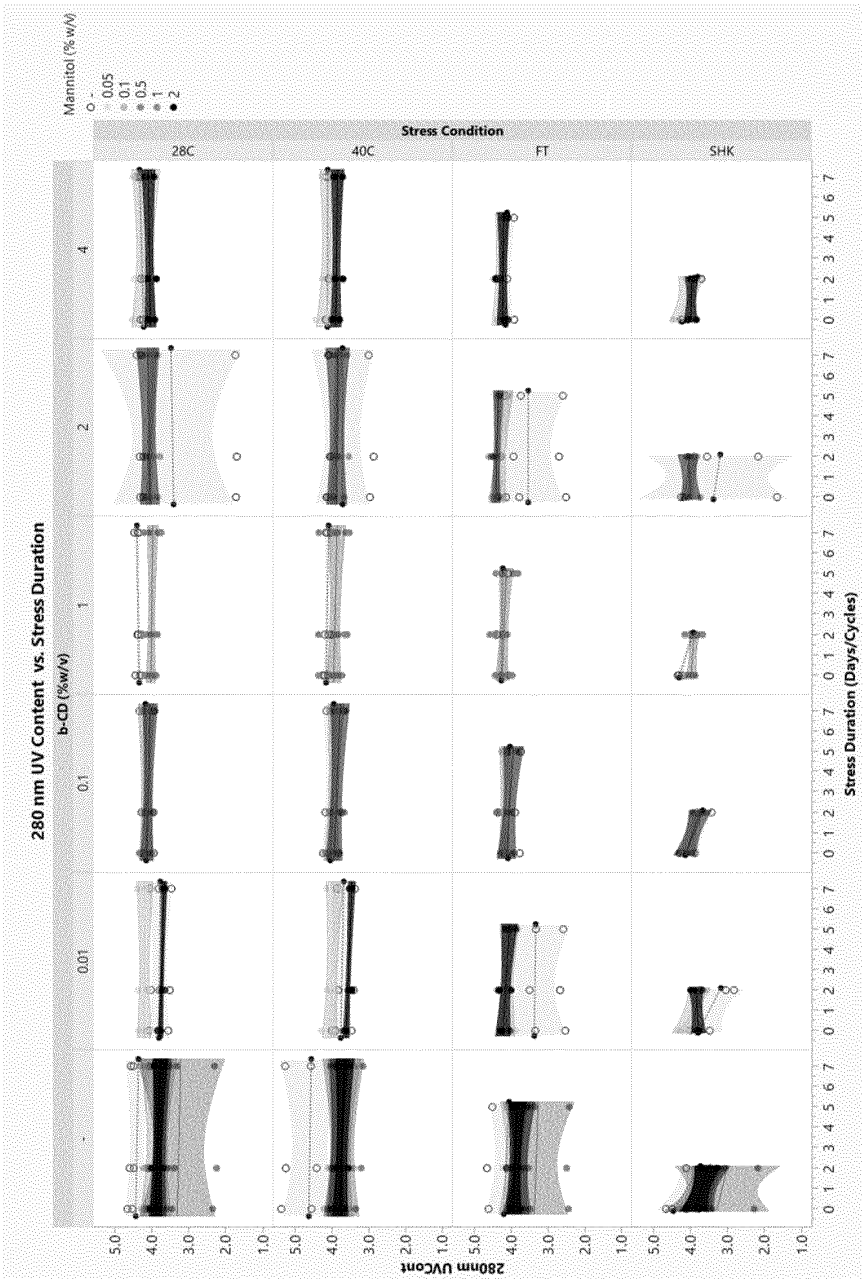


Figure 11

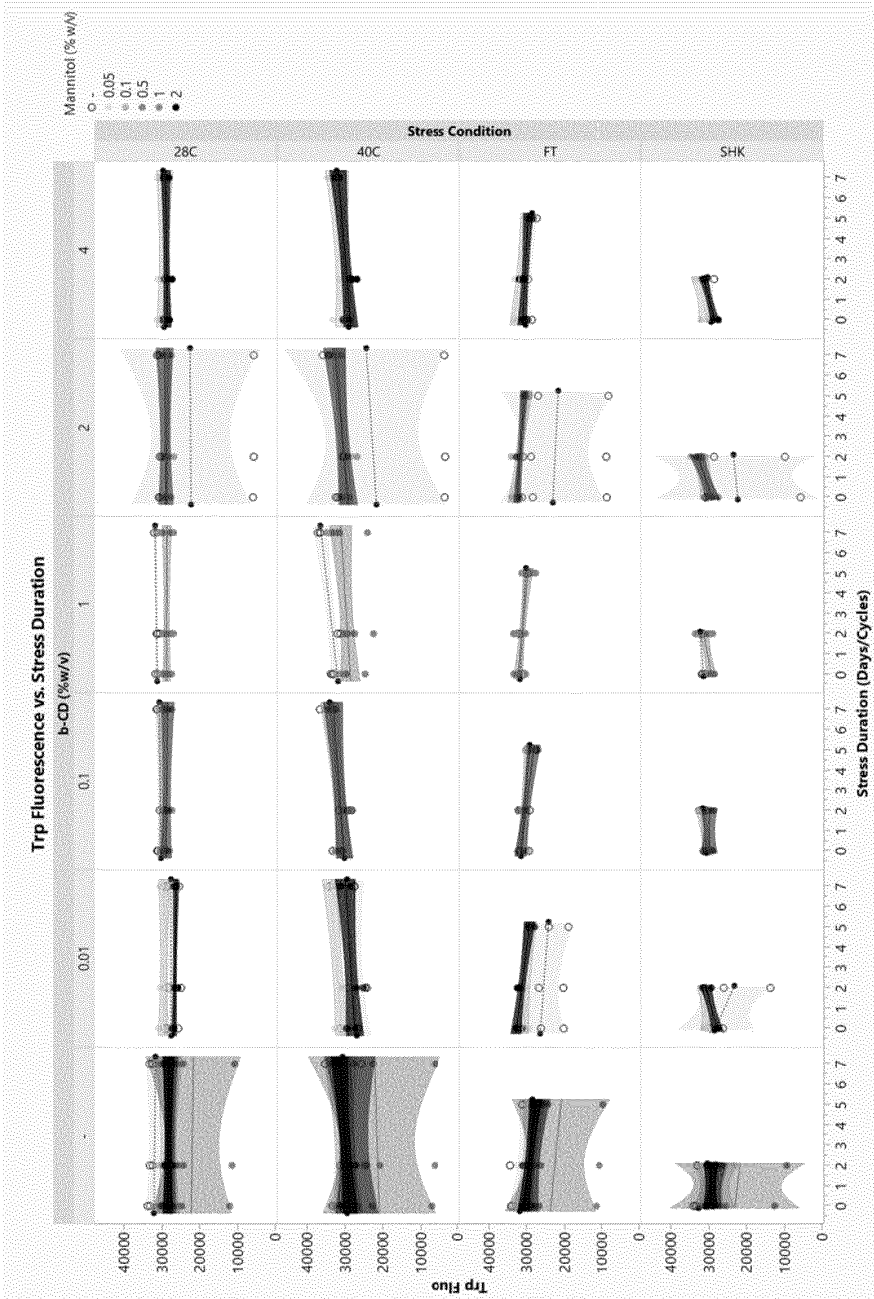


Figure 12

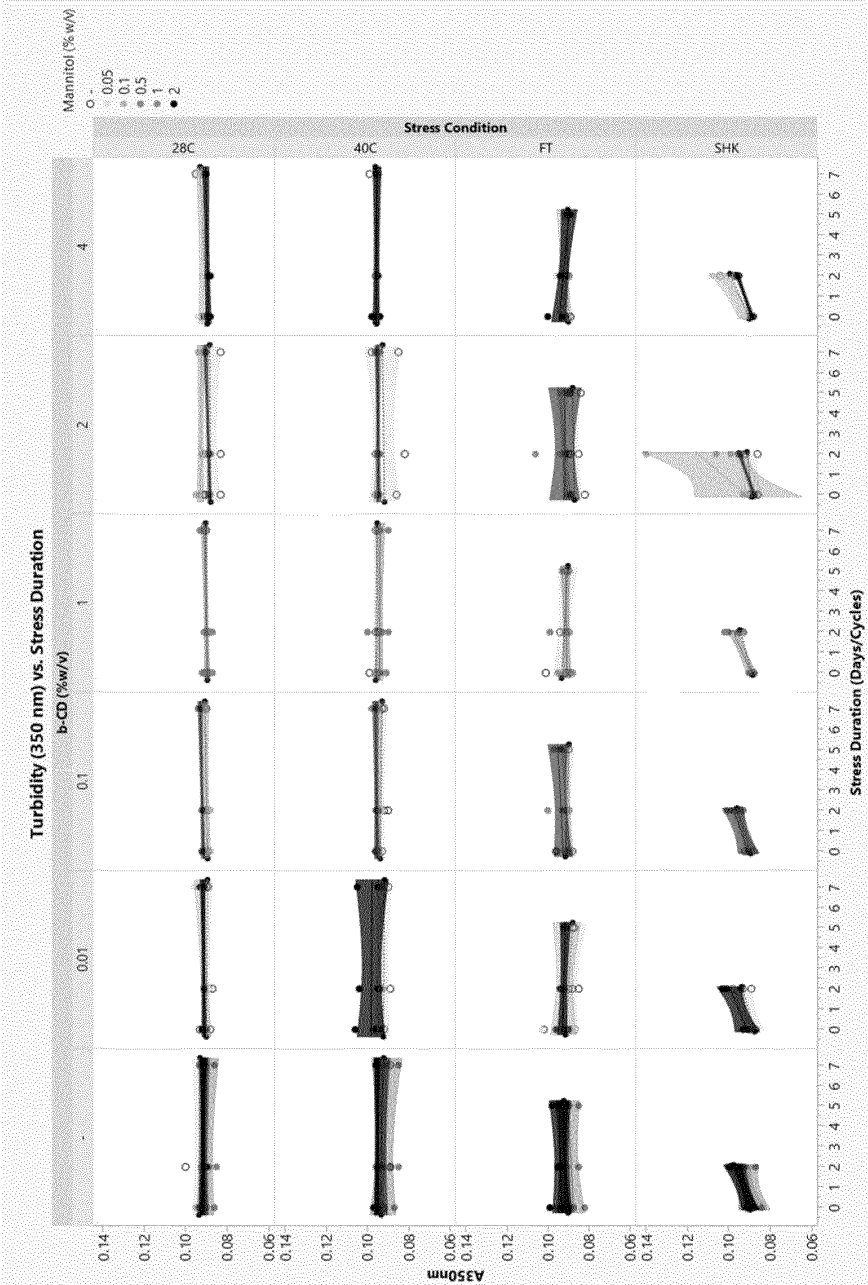


Figure 13

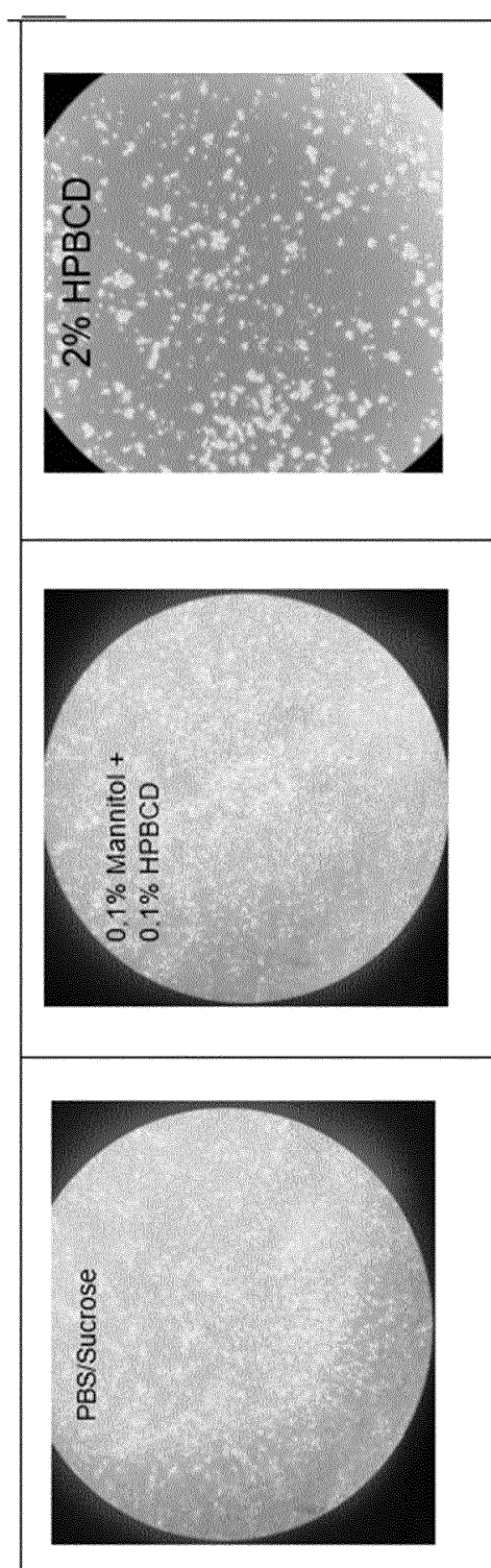


Figure 14