Intro

Basic Endpoint Protocol

Use this protocol for endpoint assays that have unknowns that will have concentrations interpolated from a standard curve. Modify the instrument setup for the wavelength(s) of interest for your assay. You may also modify the template to include additional standards, unknowns, and controls. To make modifications, click the plate section to make it active.

READER SUITABILITY:
SpectraMax M2, M2e, M3, M4, M5, and M5e.
SpectraMax Plus 384, 190, SpectraMax 190, 340PC 384 and VersaMax
Emax and Vmax

PROTOCOL REVISION HISTORY:
03/02/11 - Imported from 5.4 and edited. (ELM)
10/11/11 - Updated with the additional instruments supported in SMP 6.1

Plate1

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.9e7	2.7e7	2.7e7	1.2e7	3.0e6	1.2e7	1.3e7	1.1e7	1.2e7	4.0e6	9.6e6	5.0e6
B	1.3e7	1.3e7	1.3e7	5.4e6	6.2e6	1.4e7	1.3e7	1.5e7	4.4e6	4.7e6	6.3e6	1.1e7
C	6.6e6	6.9e6	6.6e6	2.5e7	1.0e7	9.3e6	1.2e7	6.2e6	4.0e6	9.9e6	4.7e6	1.3e7
D	3.3e6	3.3e6	3.2e6	4.8e6	2.6e7	1.0e7	1.1e7	1.2e7	1.3e7	8.9e6	1.5e7	4.9e6
E	1.6e6	1.7e6	1.5e6	6.2e6	8.6e6	9.8e6	1.0e7	1.5e7	5.1e6	7.3e6	1.1e7	1.3e7
F	5.3e5	5.1e5	4.9e5	5.6e6	1.3e7	6.9e6	9.9e6	4.9e6	6.0e6	3.3e6	2.5e7	8.3e6
G	3.8e5	4.1e5	4.0e5	6.6e6	1.0e7	4.0e6	1.2e7	7.0e6	1.2e7	6.1e6	1.1e7	8.3e6
H	2.4e4	2.4e4	2.7e4	1.0e5	7.5e6	8.9e6	8.0e6	8.3e6	8.6e6	3.5e6	1.1e7	6.9e6

Reduction Settings
Wavelength Combination : !Lm1

Settings Information
Endpoint
Fluorescence
Lm1 485, 535
Slide(s) Ex1, Em1
More Settings
Shake Off
ReadOrder Row
Show Optimizer On
PMT and Optics
Integration Time 400 ms
Read from Top
Read Height 1.00 mm

Read Information
FilterMax F5
ROM vV1.1 b32 10.12.2010
Start Read : 3:48 PM
6/25/2015

Mean Temperature : 24.5 °C

Plate2

	1	2	3	4	5	6	7	8	9	10	11	12
A	4.1e7	1.5e7	1.2e7	1.6e7	1.5e7	1.5e7	1.1e7	1.2e7	1.0e7	1.3e7	8.1e6	1.2e7
B	2.5e7	4.1e6	1.3e7	2.8e7	3.3e7	5.1e6	1.1e7	1.1e7	8.7e6	1.1e7	8.9e6	1.1e7
C	5.8e6	4.2e7	2.9e7	2.8e7	6.8e6	1.2e7	9.0e6	7.6e6	1.2e7	1.1e7	4.2e6	9.5e6
D	5.9e6	1.4e7	1.1e7	3.4e7	1.2e7	1.3e7	1.2e7	1.3e7	1.2e7	5.6e6	7.3e6	7.3e6
E	1.4e7	3.7e6	4.1e6	3.5e7	1.7e7	5.7e6	1.2e7	1.3e7	1.2e7	1.0e7	7.1e6	1.1e7
F	2.2e7	1.8e7	1.3e7	2.6e7	1.6e7	7.6e6	6.2e6	5.4e6	6.2e6	1.1e7	7.7e6	8.0e6
G	5.2e6	5.0e6	2.5e4	1.4e7	1.6e6	1.1e7	8.9e6	9.9e6	8.9e6	9.2e6	7.4e6	2.6e7
H	4.5e6	1.2e7	2.7e4	8.3e6	5.3e6	4.6e6	9.9e6	1.5e7	6.3e6	1.1e7	5.9e6	9.9e6

Reduction Settings
Wavelength Combination : !Lm1

Settings Information
Endpoint
Fluorescence
Lm1 485, 535
Slide(s) Ex1, Em1
More Settings
Shake Off
ReadOrder Row
Show Optimizer On
PMT and Optics
Integration Time 400 ms
Read from Top
Read Height 1.00 mm

Read Information
FilterMax F5
ROM vV1.1 b32 10.12.2010
Start Read : 3:51 PM
6/25/2015

Mean Temperature : 25 °C

Plate3

	1	2	3	4	5	6	7	8	9	10	11	12
A	9.5e6	1.1e7	1.1e7	1132.0	1109.0	1124.0	1161.0	1092.0	1159.0	1154.0	1151.0	1048.0
B	1.0e7	8.3e6	6.7e6	1151.0	1117.0	1161.0	1166.0	1208.0	1089.0	1109.0	1104.0	1156.0
C	5.8e6	1.4e7	1.1e7	1109.0	1158.0	1234.0	1227.0	1054.0	1197.0	1143.0	1049.0	1207.0
D	8.0e6	1.1e7	1.3e7	1083.0	1204.0	1145.0	1199.0	1017.0	1266.0	1160.0	1135.0	1101.0
E	6.1e6	1.6e7	5.9e6	1112.0	1107.0	1164.0	1102.0	1125.0	1095.0	1122.0	1196.0	1154.0
F	1.1e7	1.4e7	9.1e6	1146.0	1158.0	1149.0	1141.0	1060.0	1166.0	1078.0	1171.0	1056.0
G	4.4e6	8.6e6	9.4e6	1150.0	1163.0	1086.0	1158.0	1162.0	1155.0	1128.0	1140.0	1002.0
H	1.7e7	1.2e7	2.0e4	1152.0	1125.0	1189.0	1066.0	1209.0	1059.0	1204.0	1182.0	1138.0

Settings Information

Endpoint
- Fluorescence
  - Lm1 485, 535
  - Slide(s) Ex1, Em1
- More Settings
  - Shake Off
  - ReadOrder Row
  - Show Optimizer On
- PMT and Optics
  - Integration Time 400 ms
  - Read from Top
  - Read Height 1.00 mm

Read Information

FilterMax F5
ROM vV1.1 b32 10.12.2010
Start Read : 3:54 PM
6/25/2015

Mean Temperature : 25 °C

Reduction Settings

Wavelength Combination : !Lm1

Standards

Sample	Conc	BackCalcConc	Wells	Value	MeanValue	SD	CV
01	100....	104.936	A1	2854...	27291312....	10...	4.0
		98.226	A2	2671...			
		97.879	A3	2661...			
02	50.000	49.315	B1	1334...	13354617....	12...	1.0
		49.855	B2	1348...			
		48.929	B3	1323...			
03	25.000	24.557	C1	6572...	6674347.333	17...	2.7
		25.680	C2	6879...			
		24.552	C3	6571...			
04	12.500	12.623	D1	3310...	3269075.667	35...	1.1
		12.407	D2	3251...			
		12.388	D3	3245...			
05	6.250	6.304	E1	1582...	1602336.000	68...	4.3
		6.654	E2	1678...			
		6.170	E3	1546...			
06	3.125	2.445	F1	5275...	509231.000	20...	4.0
		2.389	F2	5124...			
		2.298	F3	4876...			
07	1.563	1.921	G1	3845...	395701.000	10...	2.7
		1.998	G2	4054...			
		1.967	G3	3970...			
08	0.000	0.602	H1	2397...	24973.333	14...	5.7
		0.604	H2	2434...			
		0.612	H3	2660...			

Smallest standard value: 24973.333

Largest standard value: 27291312.000

Unknowns

Sample	Wells	Value	R	Result	MeanResult	SD	CV
01	A4	1153...		42.709	42.709	0....	0.0
02	B4	5441...		20.422	20.422	0....	0.0
03	C4	2503...		92.100	92.100	0....	0.0
04	D4	4830...		18.186	18.186	0....	0.0
05	E4	6183...		23.133	23.133	0....	0.0
06	F4	5585...		20.947	20.947	0....	0.0
07	G4	6576...		24.570	24.570	0....	0.0
073	A1	4110...	R	150.892	150.892	0....	0.0
074	B1	2537...		93.336	93.336	0....	0.0
075	C1	5812...		21.778	21.778	0....	0.0
076	D1	5930...		22.210	22.210	0....	0.0
077	E1	1421...		52.521	52.521	0....	0.0
078	F1	2204...		81.163	81.163	0....	0.0
079	G1	5239...		19.681	19.681	0....	0.0
08	H4	1009...		0.884	0.884	0....	0.0
080	H1	4498...		16.971	16.971	0....	0.0
081	A2	1459...		53.912	53.912	0....	0.0
082	B2	4057...		15.356	15.356	0....	0.0
083	C2	4248...	R	155.908	155.908	0....	0.0
084	D2	1409...		52.076	52.076	0....	0.0
085	E2	3671...		13.947	13.947	0....	0.0
086	F2	1784...		65.792	65.792	0....	0.0
087	G2	5035...		18.935	18.935	0....	0.0
088	H2	1208...		44.706	44.706	0....	0.0
089	A3	1207...		44.700	44.700	0....	0.0
09	A5	2983...		11.430	11.430	0....	0.0
090	B3	1289...		47.686	47.686	0....	0.0
091	C3	2857...	R	105.031	105.031	0....	0.0
092	D3	1121...		41.523	41.523	0....	0.0
093	E3	4129...		15.621	15.621	0....	0.0
094	F3	1335...		49.349	49.349	0....	0.0
095	G3	2507...		0.606	0.606	0....	0.0
096	H3	2732...		0.615	0.615	0....	0.0
097	A4	1605...		59.257	59.257	0....	0.0
098	B4	2812...	R	103.390	103.390	0....	0.0
099	C4	2769...	R	101.839	101.839	0....	0.0
10	B5	6246...		23.363	23.363	0....	0.0
100	D4	3416...	R	125.508	125.508	0....	0.0
101	E4	3503...	R	128.671	128.671	0....	0.0
102	F4	2585...		95.082	95.082	0....	0.0
103	G4	1431...		52.895	52.895	0....	0.0
104	H4	8283...		30.815	30.815	0....	0.0
105	A5	1527...		56.388	56.388	0....	0.0
106	B5	3299...	R	121.204	121.204	0....	0.0
107	C5	6801...		25.395	25.395	0....	0.0
108	D5	1175...		43.529	43.529	0....	0.0
109	E5	1664...		61.410	61.410	0....	0.0
11	C5	1003...		37.231	37.231	0....	0.0
110	F5	1627...		60.042	60.042	0....	0.0
111	G5	1608...		6.398	6.398	0....	0.0
112	H5	5347...		20.077	20.077	0....	0.0
113	A6	1539...		56.833	56.833	0....	0.0
114	B6	5140...		19.320	19.320	0....	0.0
115	C6	1192...		44.148	44.148	0....	0.0
116	D6	1302...		48.147	48.147	0....	0.0
117	E6	5688...		21.324	21.324	0....	0.0
118	F6	7623...		28.401	28.401	0....	0.0

Unknowns (Contd)

Sample	Wells	Value	R	Result	MeanResult	SD	CV
119	G6	1059...		39.255	39.255	0....	0.0
12	D5	2629...		96.718	96.718	0....	0.0
120	H6	4614...		17.393	17.393	0....	0.0
121	A7	1086...		40.274	40.274	0....	0.0
122	B7	1111...		41.182	41.182	0....	0.0
123	C7	9003...		33.451	33.451	0....	0.0
124	D7	1217...		45.038	45.038	0....	0.0
125	E7	1233...		45.640	45.640	0....	0.0
126	F7	6233...		23.316	23.316	0....	0.0
127	G7	8880...		33.000	33.000	0....	0.0
128	H7	9903...		36.741	36.741	0....	0.0
129	A8	1158...		42.895	42.895	0....	0.0
13	E5	8639...		32.117	32.117	0....	0.0
130	B8	1050...		38.945	38.945	0....	0.0
131	C8	7609...		28.351	28.351	0....	0.0
132	D8	1317...		48.695	48.695	0....	0.0
133	E8	1298...		48.022	48.022	0....	0.0
134	F8	5352...		20.095	20.095	0....	0.0
135	G8	9882...		36.664	36.664	0....	0.0
136	H8	1469...		54.278	54.278	0....	0.0
137	A9	1030...		38.198	38.198	0....	0.0
138	B9	8680...		32.270	32.270	0....	0.0
139	C9	1172...		43.390	43.390	0....	0.0
14	F5	1273...		47.117	47.117	0....	0.0
140	D9	1239...		45.865	45.865	0....	0.0
141	E9	1190...		44.054	44.054	0....	0.0
142	F9	6236...		23.327	23.327	0....	0.0
143	G9	8906...		33.094	33.094	0....	0.0
144	H9	6340...		23.709	23.709	0....	0.0
145	A10	1297...		47.996	47.996	0....	0.0
146	B10	1085...		40.205	40.205	0....	0.0
147	C10	1109...		41.089	41.089	0....	0.0
148	D10	5628...		21.105	21.105	0....	0.0
149	E10	1003...		37.233	37.233	0....	0.0
15	G5	1027...		38.112	38.112	0....	0.0
150	F10	1126...		41.705	41.705	0....	0.0
151	G10	9227...		34.270	34.270	0....	0.0
152	H10	1123...		41.608	41.608	0....	0.0
153	A11	8129...		30.253	30.253	0....	0.0
154	B11	8859...		32.923	32.923	0....	0.0
155	C11	4200...		15.882	15.882	0....	0.0
156	D11	7298...		27.211	27.211	0....	0.0
157	E11	7127...		26.589	26.589	0....	0.0
158	F11	7737...		28.820	28.820	0....	0.0
159	G11	7401...		27.589	27.589	0....	0.0
16	H5	7503...		27.962	27.962	0....	0.0
160	H11	5900...		22.100	22.100	0....	0.0
161	A12	1235...		45.709	45.709	0....	0.0
162	B12	1053...		39.054	39.054	0....	0.0
163	C12	9535...		35.395	35.395	0....	0.0
164	D12	7258...		27.068	27.068	0....	0.0
165	E12	1118...		41.412	41.412	0....	0.0
166	F12	8043...		29.939	29.939	0....	0.0
167	G12	2557...		94.079	94.079	0....	0.0
168	H12	9914...		36.784	36.784	0....	0.0
169	A1	9503...		35.278	35.278	0....	0.0
17	A6	1225...		45.353	45.353	0....	0.0

Unknowns (Contd)

Sample	Wells	Value	R	Result	MeanResult	SD	CV
170	B1	1031...		38.230	38.230	0....	0.0
171	C1	5833...		21.855	21.855	0....	0.0
172	D1	8002...		29.788	29.788	0....	0.0
173	E1	6058...		22.675	22.675	0....	0.0
174	F1	1118...		41.431	41.431	0....	0.0
175	G1	4379...		16.535	16.535	0....	0.0
176	H1	1722...		63.518	63.518	0....	0.0
177	A2	1090...		40.416	40.416	0....	0.0
178	B2	8280...		30.806	30.806	0....	0.0
179	C2	1378...		50.947	50.947	0....	0.0
18	B6	1362...		50.362	50.362	0....	0.0
180	D2	1132...		41.958	41.958	0....	0.0
181	E2	1567...		57.866	57.866	0....	0.0
182	F2	1360...		50.297	50.297	0....	0.0
183	G2	8646...		32.142	32.142	0....	0.0
184	H2	1248...		46.190	46.190	0....	0.0
185	A3	1070...		39.663	39.663	0....	0.0
186	B3	6718...		25.092	25.092	0....	0.0
187	C3	1103...		40.865	40.865	0....	0.0
188	D3	1332...		49.264	49.264	0....	0.0
189	E3	5926...		22.195	22.195	0....	0.0
19	C6	9312...		34.579	34.579	0....	0.0
190	F3	9146...		33.972	33.972	0....	0.0
191	G3	9394...		34.881	34.881	0....	0.0
192	H3	2034...	R	0.589	0.589	0....	0.0
20	D6	1018...		37.777	37.777	0....	0.0
21	E6	9807...		36.391	36.391	0....	0.0
22	F6	6902...		25.764	25.764	0....	0.0
23	G6	4015...		15.202	15.202	0....	0.0
24	H6	8869...		32.961	32.961	0....	0.0
25	A7	1252...		46.329	46.329	0....	0.0
26	B7	1297...		47.969	47.969	0....	0.0
27	C7	1240...		45.882	45.882	0....	0.0
28	D7	1137...		42.114	42.114	0....	0.0
29	E7	1012...		37.570	37.570	0....	0.0
30	F7	9869...		36.616	36.616	0....	0.0
31	G7	1226...		45.392	45.392	0....	0.0
32	H7	7970...		29.670	29.670	0....	0.0
33	A8	1148...		42.509	42.509	0....	0.0
34	B8	1545...		57.042	57.042	0....	0.0
35	C8	6158...		23.044	23.044	0....	0.0
36	D8	1202...		44.502	44.502	0....	0.0
37	E8	1533...		56.606	56.606	0....	0.0
38	F8	4873...		18.344	18.344	0....	0.0
39	G8	7011...		26.164	26.164	0....	0.0
40	H8	8291...		30.845	30.845	0....	0.0
41	A9	1192...		44.148	44.148	0....	0.0
42	B9	4354...		16.444	16.444	0....	0.0
43	C9	3979...		15.073	15.073	0....	0.0
44	D9	1329...		49.159	49.159	0....	0.0
45	E9	5128...		19.275	19.275	0....	0.0
46	F9	6023...		22.548	22.548	0....	0.0
47	G9	1150...		42.588	42.588	0....	0.0
48	H9	8551...		31.797	31.797	0....	0.0
49	A10	3961...		15.007	15.007	0....	0.0
50	B10	4707...		17.736	17.736	0....	0.0
51	C10	9912...		36.776	36.776	0....	0.0

Unknowns (Contd)

Sample	Wells	Value	R	Result	MeanResult	SD	CV
52	D10	8853...		32.901	32.901	0....	0.0
53	E10	7297...		27.209	27.209	0....	0.0
54	F10	3308...		12.616	12.616	0....	0.0
55	G10	6081...		22.761	22.761	0....	0.0
56	H10	3450...		13.137	13.137	0....	0.0
57	A11	9555...		35.469	35.469	0....	0.0
58	B11	6257...		23.404	23.404	0....	0.0
59	C11	4715...		17.765	17.765	0....	0.0
60	D11	1477...		54.548	54.548	0....	0.0
61	E11	1112...		41.201	41.201	0....	0.0
62	F11	2456...		90.361	90.361	0....	0.0
63	G11	1084...		40.168	40.168	0....	0.0
64	H11	1078...		39.977	39.977	0....	0.0
65	A12	4983...		18.744	18.744	0....	0.0
66	B12	1102...		40.834	40.834	0....	0.0
67	C12	1268...		46.925	46.925	0....	0.0
68	D12	4949...		18.620	18.620	0....	0.0
69	E12	1304...		48.232	48.232	0....	0.0
70	F12	8308...		30.909	30.909	0....	0.0
71	G12	8347...		31.051	31.051	0....	0.0
72	H12	6876...		25.670	25.670	0....	0.0

R - Outside standard range

Unk_Dilution

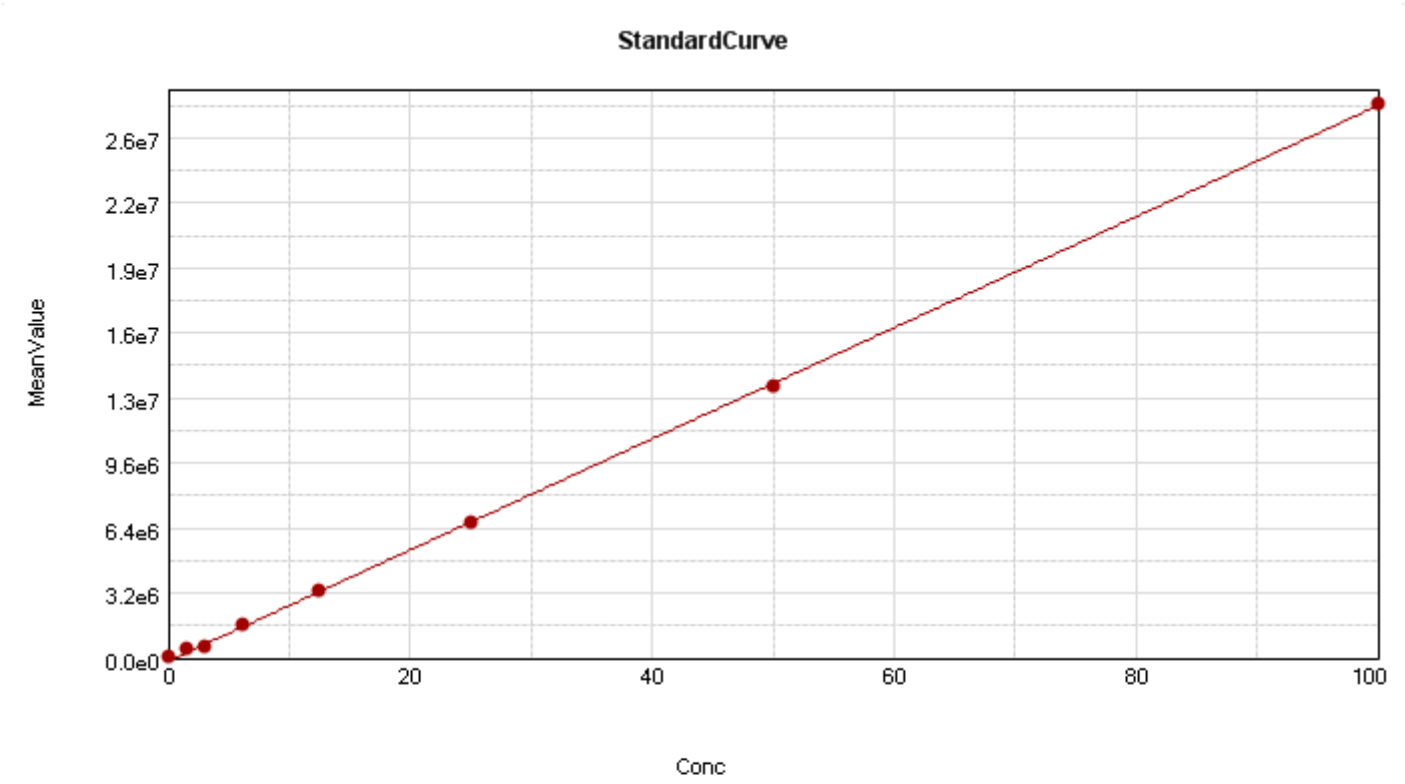
Sample	Wells	Value	R	Result	MeanResult	SD	CV	Dilution	AdjResult

R - Outside standard range

Mean Adjusted Result:

Control

Sample	Wells	Sample#	Values	MeanValue



Curve Fit Results ▲

Curve Fit : Linear $y = A + Bx$

	Parameter	Estimated Value	Std. Error	Confidence Interval
Std $R^2 = 1.000$	A	-1.41e+5	6.34e+4	[-2.96e+5, 1.45e+4]
	B	2.73e+5	1553	[2.70e+5, 2.77e+5]