**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 | | | | | | | | | | | | |
| B | | | | | | | | | | | | |
| C | | | | | | | | | | | | |
| D | | | | | | | | | | | | |
| E | | | | | | | | | | | | |
| F | | | | | | | | | | | | |
| G | | | | | | | | | | | | |
| H | | | | | | | | | | | | |

**Settings Information**
Endpoint
Absorbance
Lm1 405
More Settings
Shake Off
Calibrate On
Column Priority

**Reduction Settings**
Optical Density
Wavelength Combination : !Lm1

**Standards**

| Sample | Conc | BackCalcConc | Wells | Value | MeanValue | SD | CV |
|---|---|---|---|---|---|---|---|

Smallest standard value:

Largest standard value:

**Unknowns**

| Sample | Wells | Value | R | Result | MeanResult | SD | CV |
|---|---|---|---|---|---|---|---|

R - Outside standard range

**Unk_Dilution**

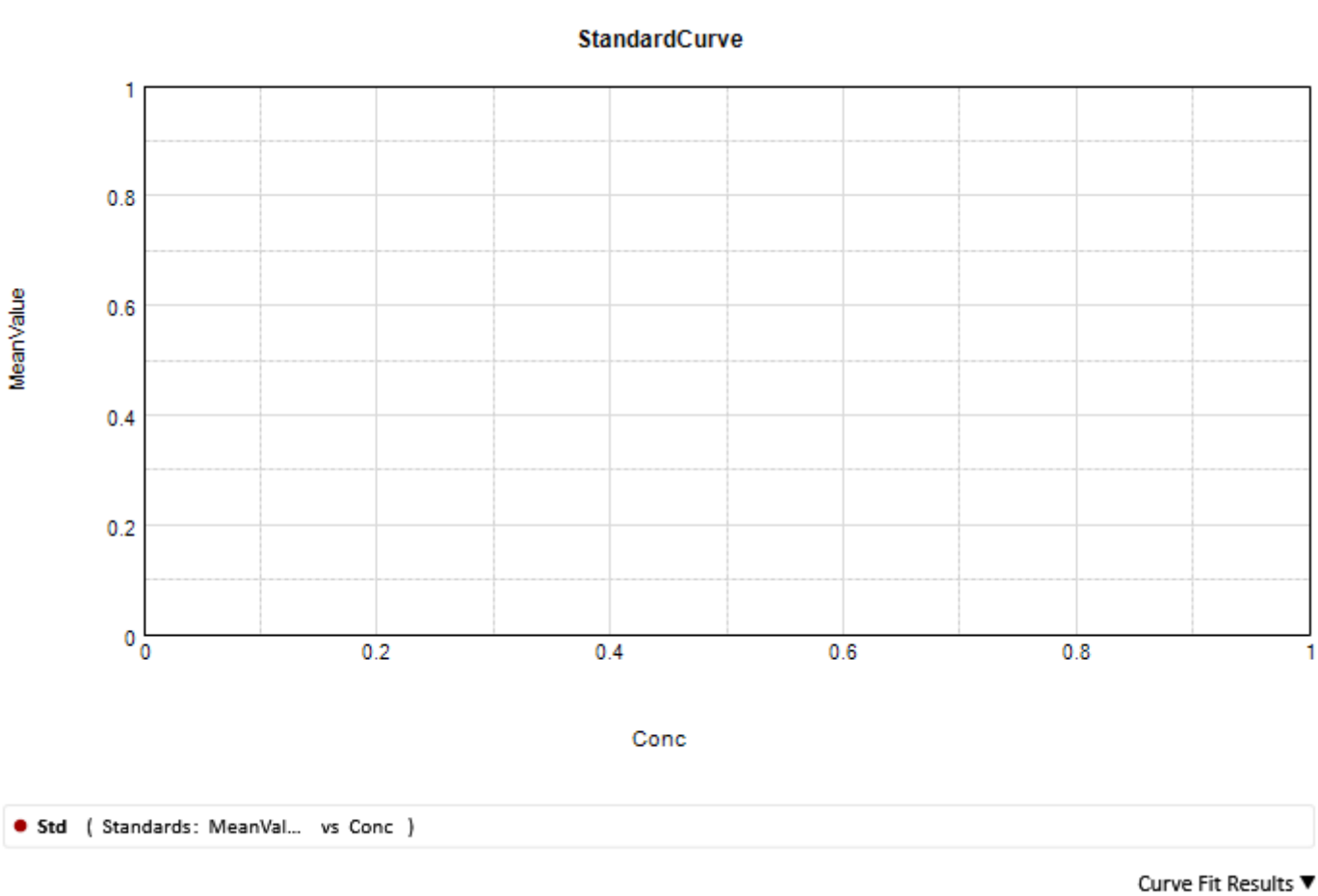
| Sample | Wells | Value | R | Result | MeanResult | SD | CV | Dilution | AdjResult |
|---|---|---|---|---|---|---|---|---|---|

R - Outside standard range

Mean Adjusted Result:

**Control**

| Sample | Wells | Sample# | Values | MeanValue |
|---|---|---|---|---|




Curve Fit Results ▼

**Plate1**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 5.7e6 | 1.6e6 | 1.2e6 | 3.4e6 | 3.7e6 | 3.5e7 | 5.1e7 | 3.0e7 | 4.6e7 | -9812 | -1.1e4 | -1.1e4 |
| B | 1.0e6 | 3.6e5 | 1.3e6 | 1.3e7 | 7.3e6 | 6.9e6 | 1.3e7 | 1.2e7 | 2.0e7 | -8184 | -1.0e4 | -9432 |
| C | 2.5e6 | 6.2e5 | 1.1e6 | 2.1e5 | 1.2e7 | 5.6e6 | 1.5e7 | 8.9e6 | 6.5e6 | -9606 | -1.0e4 | -9507 |
| D | 1.4e6 | 2.2e6 | 1.5e6 | 1.3e7 | 1.5e7 | 5.4e6 | 2.9e6 | 2.8e6 | 3.8e6 | -9937 | -8873 | -1.0e4 |
| E | 6.8e5 | 2.2e6 | 1.1e6 | 1.2e6 | 7.7e6 | 3.4e6 | 4.5e6 | 1.6e6 | 2.0e6 | -1.0e4 | -9948 | -1.0e4 |
| F | 2.7e6 | 1.4e6 | 4.7e5 | 1.3e6 | 1.1e6 | 1.2e6 | 1.2e6 | 8.5e5 | 1.3e6 | -1.0e4 | -9857 | 2.3e5 |
| G | 1.7e5 | 2.1e6 | 6.7e4 | 2.9e5 | 4.3e5 | 9.8e5 | 8.7e5 | 8.3e5 | 8.4e5 | -1.0e4 | -1.1e4 | -1.1e4 |
| H | 1.4e5 | 1.4e6 | 3.3e4 | 6.2e4 | 2.1e5 | 6.3e5 | 9.1e5 | 6.4e5 | 5.8e5 | -1.1e4 | -9192 | -1.0e4 |

**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 : 4:13 PM
4/19/2017
Temperature Set Point : 37 °C
Mean Temperature : 37 °C

**Reduction Settings**

Group Blank Used (Raw Values)
Wavelength Combination : !Lm1

**Standards**

| Sample | Conc | BackCalcConc | Wells | Value | MeanValue | SD | CV |
|---|---|---|---|---|---|---|---|
| 01 | 125.... | 117.833 | A6 | 3540... | 40657598.... | 94... | 23.2 |
| | | 167.109 | A7 | 5055... | | | |
| | | 101.177 | A8 | 3028... | | | |
| | | 153.592 | A9 | 4639... | | | |
| 02 | 63.340 | 25.079 | B6 | 6889... | 12854061.... | 53... | 41.5 |
| | | 43.458 | B7 | 1253... | | | |
| | | 42.083 | B8 | 1211... | | | |
| | | 67.307 | B9 | 1987... | | | |
| 03 | 32.100 | 20.895 | C6 | 5603... | 8998585.125 | 42... | 46.9 |
| | | 51.370 | C7 | 1497... | | | |
| | | 31.726 | C8 | 8932... | | | |
| | | 23.770 | C9 | 6486... | | | |
| 04 | 17.190 | 20.144 | D6 | 5372... | 3725555.875 | 11... | 31.8 |
| | | 12.151 | D7 | 2915... | | | |
| | | 11.821 | D8 | 2813... | | | |
| | | 15.031 | D9 | 3800... | | | |
| 05 | 7.860 | 13.835 | E6 | 3432... | 2883492.625 | 13... | 45.8 |
| | | 17.237 | E7 | 4478... | | | |
| | | 7.904 | E8 | 1609... | | | |
| | | 9.213 | E9 | 2012... | | | |
| 06 | 4.210 | 6.472 | F6 | 1169... | 1128517.375 | 19... | 17.1 |
| | | 6.629 | F7 | 1217... | | | |
| | | 5.424 | F8 | 8473... | | | |
| | | 6.829 | F9 | 1279... | | | |
| 07 | 2.720 | 5.869 | G6 | 9841... | 880803.375 | 71... | 8.1 |
| | | 5.501 | G7 | 8710... | | | |
| | | 5.376 | G8 | 8325... | | | |
| | | 5.385 | G9 | 8354... | | | |
| 08 | 2.070 | 4.724 | H6 | 6323... | 691030.125 | 14... | 21.1 |
| | | 5.615 | H7 | 9059... | | | |
| | | 4.754 | H8 | 6415... | | | |
| | | 4.568 | H9 | 5841... | | | |

Smallest standard value: 691030.125

Largest standard value: 40657598.875

**Unknowns**

| Sample | Wells | Value | R | Result | MeanResult | SD | CV |
|---|---|---|---|---|---|---|---|
| 01 | A1 | 5660... | | 21.080 | 21.080 | 0.... | 0.0 |
| 02 | B1 | 1048... | | 6.079 | 6.079 | 0.... | 0.0 |
| 03 | C1 | 2490... | | 10.768 | 10.768 | 0.... | 0.0 |
| 04 | D1 | 1437... | | 7.344 | 7.344 | 0.... | 0.0 |
| 05 | E1 | 6762... | R | 4.867 | 4.867 | 0.... | 0.0 |
| 06 | F1 | 2657... | | 11.311 | 11.311 | 0.... | 0.0 |
| 07 | G1 | 1700... | R | 3.220 | 3.220 | 0.... | 0.0 |
| 08 | H1 | 1394... | R | 3.121 | 3.121 | 0.... | 0.0 |
| 09 | A2 | 1630... | | 7.971 | 7.971 | 0.... | 0.0 |
| 10 | B2 | 3644... | R | 3.853 | 3.853 | 0.... | 0.0 |
| 11 | C2 | 6236... | R | 4.696 | 4.696 | 0.... | 0.0 |
| 12 | D2 | 2170... | | 9.729 | 9.729 | 0.... | 0.0 |
| 13 | E2 | 2187... | | 9.782 | 9.782 | 0.... | 0.0 |
| 14 | F2 | 1383... | | 7.166 | 7.166 | 0.... | 0.0 |
| 15 | G2 | 2066... | | 9.391 | 9.391 | 0.... | 0.0 |
| 16 | H2 | 1404... | | 7.237 | 7.237 | 0.... | 0.0 |
| 17 | A3 | 1238... | | 6.695 | 6.695 | 0.... | 0.0 |
| 18 | B3 | 1296... | | 6.883 | 6.883 | 0.... | 0.0 |
| 19 | C3 | 1139... | | 6.374 | 6.374 | 0.... | 0.0 |
| 20 | D3 | 1451... | | 7.389 | 7.389 | 0.... | 0.0 |
| 21 | E3 | 1061... | | 6.121 | 6.121 | 0.... | 0.0 |
| 22 | F3 | 4653... | R | 4.181 | 4.181 | 0.... | 0.0 |
| 23 | G3 | 6686... | R | 2.885 | 2.885 | 0.... | 0.0 |
| 24 | H3 | 3290... | R | 2.774 | 2.774 | 0.... | 0.0 |
| 25 | A4 | 3384... | | 13.677 | 13.677 | 0.... | 0.0 |
| 26 | B4 | 1321... | | 45.641 | 45.641 | 0.... | 0.0 |
| 27 | C4 | 2133... | R | 3.361 | 3.361 | 0.... | 0.0 |
| 28 | D4 | 1266... | | 43.874 | 43.874 | 0.... | 0.0 |
| 29 | E4 | 1153... | | 6.419 | 6.419 | 0.... | 0.0 |
| 30 | F4 | 1337... | | 7.018 | 7.018 | 0.... | 0.0 |
| 31 | G4 | 2874... | R | 3.602 | 3.602 | 0.... | 0.0 |
| 32 | H4 | 6203... | R | 2.869 | 2.869 | 0.... | 0.0 |
| 33 | A5 | 3675... | | 14.624 | 14.624 | 0.... | 0.0 |
| 34 | B5 | 7250... | | 26.255 | 26.255 | 0.... | 0.0 |
| 35 | C5 | 1182... | | 41.148 | 41.148 | 0.... | 0.0 |
| 36 | D5 | 1481... | | 50.862 | 50.862 | 0.... | 0.0 |
| 37 | E5 | 7738... | | 27.842 | 27.842 | 0.... | 0.0 |
| 38 | F5 | 1092... | | 6.222 | 6.222 | 0.... | 0.0 |
| 39 | G5 | 4333... | R | 4.077 | 4.077 | 0.... | 0.0 |
| 40 | H5 | 2122... | R | 3.358 | 3.358 | 0.... | 0.0 |

R - Outside standard range

**Unk_Dilution**

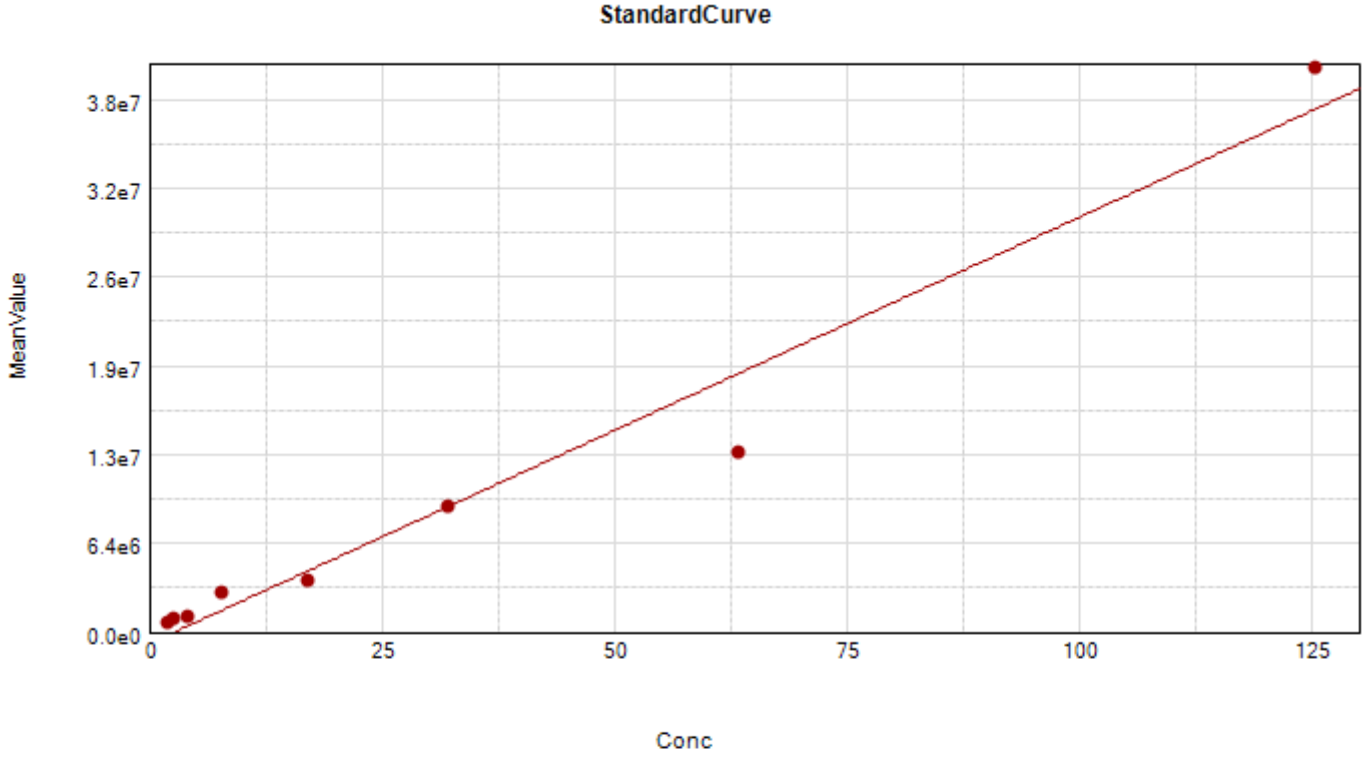
| Sample | Wells | Value | R | Result | MeanResult | SD | CV | Dilution | AdjResult |
|---|---|---|---|---|---|---|---|---|---|

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** $R^2 = 0.964$ | A | -8.20e+5 | 1.25e+6 | [-3.88e+6, 2.24e+6] |
| | B | 3.07e+5 | 2.43e+4 | [2.48e+5, 3.67e+5] |