CTech™ SoloVPE® System

Variable Pathlength Spectroscopy®

The CTech™ SoloVPE® System is the technological innovation behind the Slope Spectroscopy® method. Unlike traditional UV-Vis methods that rely on a single absolute absorbance value, the Slope Spectroscopy method uses section data (absorbance vs. pathlength data) to determine a slope value for quantitation of sample concentration using the Slope Spectroscopy equation ($m = \varepsilon c$) which is derived from the Beer-Lambert law.

Contact a Repligen analytical representative at +1 908-707-1009 or analytics-support@repligen.com.

No Dilution

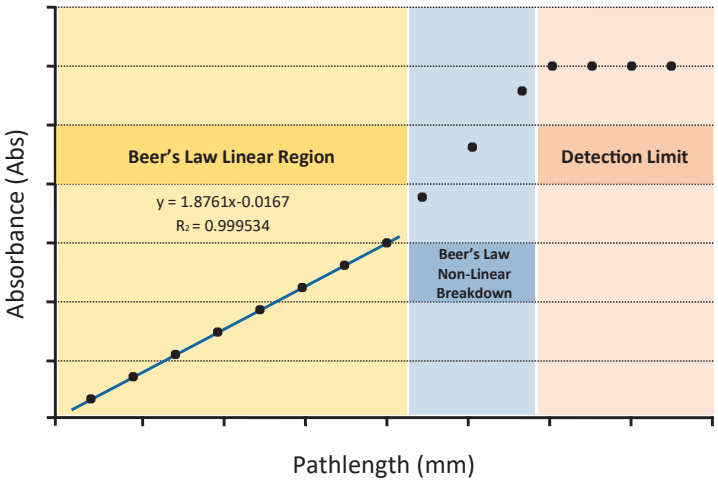
Variable pathlength technology (VPT), used in the SoloVPE System, allows even highly concentrated samples to be measured without dilution and baseline correction. The internationally patented SoloVPE instrument is deployed throughout global organizations, allowing increased accuracy while saving time and money.

No Baseline Correction

Typically, all standard abs measurements to calculate concentration have been based on a single absorbance value. In the case of slope measurements, buffer correction is not required when the slope is equal to zero. Therefore, the chosen buffer is not contributing to the sample and can be eliminated from the method/experiment.

Proving True Linearity

The R^2 value of the linear regression confirms that the absorbance values are changing proportionally with pathlength in accordance with the Beer-Lambert law and therefore prove accuracy within every sample tested.



Features and Benefits

- No dilutions
- Slope-based measurements based on R^2 of 0.999 or higher
- No baseline correction/buffer
- Guaranteed data in linear range of Beer-Lambert's law
- Common platform UV
- Repeatability: ±2%
- Less than 1 minute per sample reading
- Antibody concentration range: 0.01 mg/ml to 300 mg/ml
- Minimum volume: <20 µl (concentration-dependent)
- Pathlength range: 0.005 mm–15 mm (smallest resolution: 0.005 mm (5 µm))
- Wavelength range: 190 nm–1100 nm

Visit ctech.repligen.com for more information.