

Product Information

dsDNA Quantitation Kit

Catalog Number: TBD

For use with handheld fluorometers such as the FluoroVerse™

Kit Contents

Component	31066-T 100 assays	31066 500 assays
Dye, 200X	99817-T 250 uL	99817 1.25 mL
DNA Quantitation Buffer, 20X Concentrate	99979-3mL 3 mL	99979-12.5mL 12.5 mL
Standard 1 (0 ng/uL)	99819-T 1 mL	99819 5 mL
Standard 2 (10 ng/uL)	99820-T 1 mL	99820 5 mL

Storage and Handling

Store all kit components at 4°C. The Solution is also stable for storage at room temperature for at least 6 months, protected from light. Product is stable for at least 6 months from date of receipt when stored as recommended.

Spectral Properties

Ex/Em: 509/530 nm (bound to dsDNA). See Figure 1 for spectra.

Product Description

The High Sensitivity dsDNA Quantitation Kit is designed for use with handheld fluorometers such as the FluoroVerse™ from OMEC Medical. Unlike absorbance-based measurements, the Dye is highly selective for double-stranded DNA over single-stranded DNA or RNA.

The linear range of the assay is 0.1 to 100 ng of DNA per tube. DNA samples with concentrations between 5 pg/uL and 100 ng/uL may be quantified using sample volumes between 1 and 20 uL (for example, 1 uL of 100 ng/uL is 100 ng total, and 20 uL of 5 pg/uL is 0.1 ng total, which will both fall within the linear range of the assay). If you use the most common sample volume of 10 uL, the starting sample concentration should be 10 pg/uL to 10 ng/uL.

The dsDNA Quantitation assay is optimized for use in the FluoroVerse™ from OMEC Medical, using the pre-programmed dsDNA program.

Assay Considerations

Calf thymus DNA can serve as a reference for most plant and animal DNA because it is double-stranded, highly polymerized and is approximately 58% AT (42% GC). Lambda dsDNA yields similar results. You may wish to use a standard similar to your unknown samples in DNA length, structure (i.e., linear vs. circular), or GC content. For bacterial DNA, a species-specific standard may be desired because the GC content varies widely depending on the species.

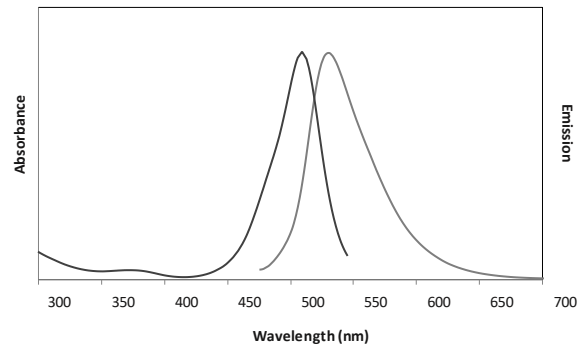


Figure 1. Absorbance and emission spectra of Dye bound to dsDNA.

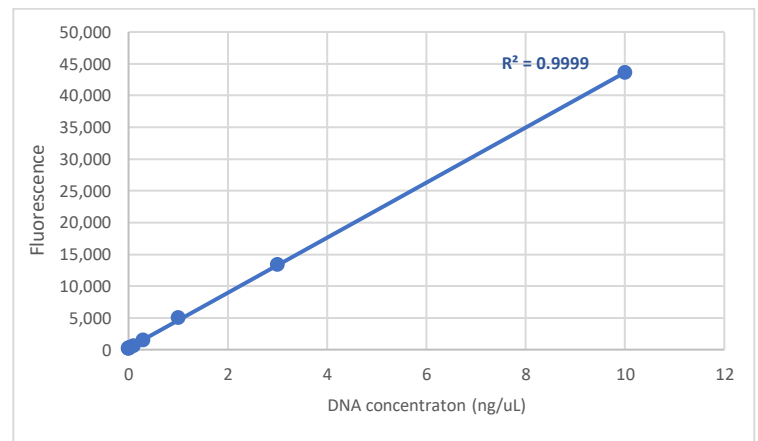


Figure 2. Linearity of High Sensitivity dsDNA Quantitation assay as measured in the FluoroVerse™

Please visit our website at www.omecmedical.com for information on our life science research products including DNA quantitation kits, and other reagents for molecular and cell biology research.

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