AccuGreen™ High Sensitivity dsDNA Quantitation Kit



A fluorescent dsDNA quantitation kit with a linear range of 0.1-100 ng DNA. Designed for use with handheld fluorometers such as the Qubit® fluorometer from Thermo Fisher Scientific.

Product attributes

Excitation/Emission	502/523 nm (with DNA)
Storage Conditions	Store at 2 to 8 °C

Product Description

The AccuGreen™ High Sensitivity dsDNA Quantitation Kit offers sensitive and selective detection of purified dsDNA samples. The kit provides a linear detection range from 0.1 – 100 ng and is designed for use with handheld fluorometers such as the Qubit® fluorometers from Thermo Fisher Scientific. The AccuGreen™ High Sensitivity assay is also available without a DNA standard (31068), for those that wish to use their own standard.

AccuGreen™ for the Qubit® fluorometer

The AccuGreen™ High Sensitivity dsDNA Quantitation Kit is designed for use with handheld fluorometers such as the Qubit® fluorometers from Thermo Fisher Scientific.

The linear range of the AccuGreen™ 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.

Fluorescence-Based dsDNA Quantitation

AccuBlue®, AccuClear® and AccuGreen™ dsDNA quantitation assays allow precise quantitation of purified dsDNA samples across a wide range of concentrations and a variety of fluorescence detection instruments. Unlike absorbance-based nucleic acid quantitation, fluorescent DNA binding dyes are highly sensitive and selective for double-stranded DNA and provide a more accurate DNA concentration in the presence of contaminating RNA and other common contaminants including free nucleotides, protein, detergents and salts.

Biotium offers dsDNA quantitiation kits and solutions for different instruments and sample concentration ranges. See the table below and visit the DNA & RNA Quantitation Technology Page for details on our full line of dsDNA and RNA quantitation kits.

All DNA & RNA Quantitation Kits

Kit	DNA or RNA	Detection range (in assay)*	Dye Ex/Em (nm)	Suggested instrument	Features
AccuGreen™ High Sensitivity DNA	DNA	0.1-100 ng	502/523	Qubit® fluorometer	Compare to the Qubit® dsDNA HS assay from Thermo Fisher
AccuGreen™ Broad Range DNA	DNA	2-1000 ng	500/530	Qubit® fluorometer	Compare to the Qubit® dsDNA BR assay from Thermo Fisher Non-toxic & non-mutagentic DNA quantitation dye
AccuBlue® NextGen DNA	DNA	1-3000 pg**	468/507	Fluorescence microplate reader	Most sensitive assay available for quantitation of precious or dilute samples Optimal for sensitive applications such as NGS or digital PCR
AccuClear® Ultra High Sensitivity DNA	DNA	0.03-250 ng	468/507	Fluorescence microplate reader	Versatile kit with high sensitivity and wide linear range
AccuBlue® High Sensitivity DNA	DNA	0.2-100 ng	485/530	Fluorescence microplate reader	Non-toxic & non-mutagentic DNA quantitation dye
AccuBlue® Broad Range DNA	DNA	2-2000 ng	350/460	Fluorescence microplate reader	Broad linear range with blue fluorescence
AccuBlue® Broad Range RNA	RNA	5-1000 ng	650/670	Fluorescence microplate reader or Qubit® fluorometer	The widest linear range of available RNA quantitation kits Exceptional accuracy, sensitivity, and high RNA selectivity

* Standard assay volume is 200 uL
** AccuBlue® NextGen limit of detection is in the range of 1 pg to 5 pg depending on instrument sensitivityAccuBlue and AccuClear are registered trademarks of Biotium, Inc. AccuBlue,

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