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AccuClear® Ultra High Sensitivity dsDNA Quantitation Solution

A fluorescent dsDNA quantitation solution with a wide linear range of 0.03-250 ng DNA. Designed for use in a fluorescence microplate reader.



Product attributes

Excitation/Emission	468/507 nm (with DNA)
Storage Conditions	Store at 2 to 8 °C

Product Description

The AccuClear® Ultra High Sensitivity dsDNA Quantitation Solution offers sensitive and selective detection of purified DNA samples, designed for use with fluorescence microplate readers. AccuClear® is our most popular DNA quantitation kit, with a very wide linear detection range from 0.03 – 250 ng. This solution does not come with a DNA standard; see the AccuClear® Ultra High Sensitivity dsDNA Quantitation Kits ([31028&31029](#)) which contains calf thymus DNA standards.

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 quantitation 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-mutagenic 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-mutagenic 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 µL

** AccuBlue® NextGen limit of detection is in the range of 1 pg to 5 pg depending on instrument sensitivity. AccuBlue and AccuClear are registered trademarks of Biotium, Inc. AccuBlue,

References

1. J Food Sci (2015) May;80(5):M1031-8 doi: [10.1111/1750-3841.12848](https://doi.org/10.1111/1750-3841.12848)
2. Analytical Biochemistry (2016) 15 Oct pp74-79 doi: [10.1016/j.ab.2016.07.022](https://doi.org/10.1016/j.ab.2016.07.022)
3. Microbiome (2018), Oct 20;6(1):188 doi: [10.1186/s40168-018-0529-x](https://doi.org/10.1186/s40168-018-0529-x)
4. Biotechniques (2018) 64:59-68 doi: [10.4155/btn-2017-0102](https://doi.org/10.4155/btn-2017-0102)

This datasheet was generated on May 8, 2026 at 01:06:32 PM. Visit product page to check for updated information before use.

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