

Bacterial Viability and Gram Stain Kit

A convenient assay for distinguishing between gram-negative and gram-positive, as well as live versus dead bacteria.



Product attributes

Product Description

The Bacterial Viability and Gram Stain Kit contains three dyes (CF®488A WGA, DAPI and EthD-III) for distinguishing between gram-negative and gram-positive, as well as live versus dead bacteria.

WGA binds specifically to N-acetylglucosamine in the peptidoglycan layer of gram-positive bacteria. The Bacterial Viability and Gram Stain Kit contains WGA conjugated to CF®488A to stain the surface of gram-positive cells with green fluorescence. Ethidium Homodimer III (EthD-III) is a nucleic acid binding dye that is membrane impermeable, which selectively stains cells with compromised plasma membranes with red fluorescence. All cells stain blue with the membrane permeable DNA dye DAPI. One kit is sufficient for 200 assays when used according to the kit protocol.

The Bacterial Viability and Gram Stain Kit has been tested on the following bacterial species: *Bacillus subtilis* subsp. *subtilis*, *Escherichia coli*, *Micrococcus luteus*, *Pseudomonas fluorescens*, and *Staphylococcus epidermidis*.

Biotium also offers [BactoView™ Dead Stains](#) and [BactoView™ Viability Kits](#) for highly-selective staining of dead bacteria, available in a selection of 7 colors from green to near-IR. BactoView™ Dead Stains also can be combined with fluorescent Gram stains like our [CF® Dye WGA Conjugates](#).

[BactoView™ Live Green](#) and [BactoView™ Live Red](#) are designed for staining both live and dead bacteria. Note that BactoView™ Stains cannot be used to distinguish bacteria from eukaryotic cells, because they will stain other cell types as well. For bright and optimized labeling of bacterial endospores, see our [BactoSpore™ Bacterial Stains](#).

See our full selection of [Microbiology Stains & Kits](#).

This datasheet was generated on January 8, 2026 at 03:00:18 PM. Visit product page to check for updated information before use.
Product link: <https://biotium.com/product/bacterial-viability-and-gram-stain-kit/>