

EMBER™ Ultra DNA Gel Kit

The most sensitive DNA gel stain available in convenient pre-coated agarose format with no need for post-electrophoresis staining.



Product attributes

Storage Conditions	Components have different storage temperatures, open kit on receipt.
Assay type/options	DNA gel staining

Product Description

The EMBER™ Ultra DNA Gel system provides the highest sensitivity and resolution for DNA among currently available agarose gel stains without the need for a post-electrophoresis staining step. Simply cast your agarose gel using the EMBER™ Ultra Precoated Agarose, and prepare your samples in the EMBER™ Ultra DNA Loading Dye. Bands can be imaged immediately after electrophoresis.

Note: The number of gels per kit is based on a 9x11 cm, 1% agarose mini gel (0.5 g agarose in 50 mL buffer per gel). The actual number may vary depending on gel size.

Simple, Quick, & Highly Sensitive DNA Gel Staining

EMBER™ Ultra Precoated Agarose is ultra-pure molecular biology grade agarose with low electroendosmosis that is precoated with Biotium's fluorescent EMBER™ Ultra Dye. This novel gel system using EMBER™ Ultra Precoated Agarose with EMBER™ Ultra Loading Dye is more sensitive than currently available DNA dyes, allowing detection of as little as ≤ 1 ng DNA. The gel system does not require a post-electrophoresis staining step, for convenient and fast results. EMBER™ Ultra Precoated Agarose gives excellent results at percentages between 1% and 5% agarose, for analyzing different sizes of DNA. EMBER™ Ultra also has excellent sensitivity for single-stranded DNA and small DNA fragments. The dye will also detect RNA, but for best results with RNA, we recommend our [EMBER™ Ultra RNA Agarose Gel Kit](#).

The EMBER™ Ultra DNA Loading Dye is specifically formulated to work with EMBER™ Ultra Precoated Agarose to provide superior sensitivity. The loading dye has green fluorescence with excitation/emission at 500/530 nm when bound to nucleic acids. For best results, we recommend imaging with a Biotium's [Gel-Bright™ Laser Diode Gel Illuminator](#) or a blue light illuminator. Gels can also be imaged using a UV transilluminator equipped with a SYBR® filter (recommended) or EtBr filter (with lower signal). The loading dye contains blue and orange tracking dyes that migrate at ~ 1500 bp (blue) and ~ 50 bp (orange) in a 1% agarose gel.

View Biotium's other unique products for [DNA/RNA gel electrophoresis](#) and [qPCR](#).

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