Glowing products for science

## 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

Call us: 800-304-5357 Email: btinfo@biotium.com

## **Product Description**

The EMBER<sup>TM</sup> 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<sup>TM</sup> Ultra Precoated Agarose, and prepare your samples in the EMBER<sup>TM</sup> Ultra DNA Loading Dye. Bands can be imaged immediately after electrophoresis.

**Note:** The number of gels per kit is based on a  $9 \times 11$  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<sup>TM</sup> Ultra DNA Loading Dye is specifically formulated to work with EMBER<sup>TM</sup> 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<sup>TM</sup> 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.

SYBR is a registered trademark of Thermo Fisher Scientific.

This datasheet was generated on November 4, 2025 at 10:45:05 PM. Visit product page to check for updated information before use. Product link: <a href="https://biotium.com/product/ember-ultra-dna-gel-kit/">https://biotium.com/product/ember-ultra-dna-gel-kit/</a>