

# Product Information

## EB Succinimidyl Ester

**Catalog Number:** 40072

**Unit Size:** 5 mg

**Molecular Weight:** 498

### Storage and Handling

Store desiccated at -20°C, protected from light. Product is stable for at least 1 years from date of receipt when stored as recommended. After reconstitution in DMSO, store the solution desiccated at -20°C, protected from light. Solution should be stable for at least 1 month when stored as recommended. Ethidium bromide is a known potential mutagen. It should be handled and disposed of using laboratory safety precautions.

### Waste disposal

Since ethidium bromide is a known mutagen, it should be disposed as hazardous waste according to your local regulations, or decontaminated using activated charcoal before disposing down the sink.

### Spectral Properties

Ex/Em: 522/593 nm\* (with DNA)

\*Ethidium bromide also has a strong UV absorbance peak at 279 nm

### Product Description

Ethidium bromide (EB) is a widely used nucleic acid binding dye. Once bound to nucleic acids, the fluorescence of the dye is enhanced by more than 10 times while the excitation maximum is red-shifted by 30-40 nm and emission is blue-shifted by ~ 15 nm.

The amine reactive succinimidyl ester of EB can be conjugated to peptides, proteins, drugs, polymeric materials and biomolecules with primary amine groups. Conjugates of EB are expected to be essentially nonfluorescent until they are able to complex with nucleic acids, resulting in red fluorescence. The conjugates might be useful for studies of nucleic acid binding to various biomolecules, such as DNA-binding proteins. It is also possible that EB conjugates of other biomolecules may allow monitoring their transport into the nucleus. EB dye conjugates of solid or semisolid matrices, such as microspheres, magnetic particles or various resins, might be useful for the detection or affinity isolation of nucleic acids.

### Related Products

Catalog number	Product
90082	DMSO, Anhydrous
40042	Ethidium Bromide, 10 mg/mL in H <sub>2</sub> O
40074	Acridine Orange (AO) Succinimidyl Ester
40073	Thiazole Orange (TO) Succinimidyl Ester
40075	Methylene Blue (MB) Succinimidyl Ester
40014	Ethidium Monoazide (EMA)
40013	Propidium Monoazide (PMA)
92103-92155	CF® Dye Succinimidyl Ester
90016-90049	Cyanine Dye Succinimidyl Ester
41003	GelRed® Nucleic Acid Gel Stain, 10,000X in Water
41005	GelGreen® Nucleic Acid Gel Stain, 10,000X in Water
22007	Activated Charcoal Decontamination Bags

Please visit our website at [www.biotium.com](http://www.biotium.com) for information on our life science research products, including environmentally friendly EvaGreen® qPCR master mixes, DNA and protein gel stains, Western blot reagents, fluorescent CF® dye antibody conjugates and reactive dyes, apoptosis reagents, fluorescent probes, and kits for cell biology research.

Materials from Biotium are sold for research use only, and are not intended for food, drug, household, or cosmetic use.