Ethidium Bromide

Product Information

Name: Ethidium Bromide (EB, EtBr, BET)
Catalog Number: FP-06022A, 5x1g FP06022B, 5g

FP-32790A; 5ml @ 0625mg/ml, dropperr

Structure: CAS:1239-45-8

CAS: 25535-16-4; C₂₁H₂₀brN₃

Molecular Weight: MW= 394.32 (Z) **Solubility:** Water or DMSO

Absorption / Emission : \(\lambda \text{exc./\lambda} \text{em. (EB-DNA complex): 518/605nm} \)

EC $(M^{-1} cm^{-1})$:

 H_2N N^+ CH_2CH_3 Br^-

Potent mutagen





Storage: Room temperature (powder, solution) or 4°C (solution).

Protect from light. DO NOT FREEZE

Technical Information

EtBr, as Propidium Iodide (PI), is a phenanthridinium DNA intercalator. It is largely used for nucleic acid staining after gel electrophoresis, but also in fluorescence microscopy, confocal laser-scanning microscopy, flow cytometry and fluorometry (excited with mercury or xenon-arc lamps or with the argon-ion laser). One dye binds in a sequence-random manner per 4–5 base pairs of DNA, eliciting a 30-40 fold fluorescence enhancement. It is membrane impermeant, and bind also to RNA.

Ethidium Bromide is a highly pure, DNase/RNase free product graded for Biotech applications (specifications on inquire). It is available as a powder and as solutions for added safety and convenience, at 10 mg/ml and at readyto-use concentration in a dropper bottle.

Ethidium Bromide solutions are the safest and most convenient means to prepare gels, solutions and gradients for your molecular biology applications. The solutions are prepared from high purity grade Ethidium Bromide at a concentration of 0.636 mg/ml in ultra pure water.

The **dropper format** make dispensing the chemical safer and more convenient while maintaining consistent results. It minimizes your exposure to this hazardous compound for all of your nucleic acid staining applications. Each dispensed drop contains 25 μ g of Ethidium Bromide at a concentration of 0.625 mg/ml, the recommended concentration for a 50 ml agarose gel).

- For small gels, simply add one drop of the Ethidium Bromide solution per 50 ml gel solution (before gelation) and cast your gel as usual. The final concentration of Ethidium Bromide will be $0.5~\mu g/ml$, the recommended concentration for electrophoresis of nucleic acids.
- For larger gels, add an additional drop for each additional 50 ml gel solution.
- For those who wish to run their gels with Ethidium Bromide in the running buffer, or stain their gels following electrophoresis, the same dilutions apply. One drop per 50 ml solution.

FT-32790A

Related products

- Ethidium Bromide derivatives are available, dedicated to specific applications, including:
- -DihydroEthidium #FP-52492A that is cell permeant and needs to be reduced,
- -Ethidium homodimer-1 #FP-25810A, which much strongly bind to dsDNA, ssDNA, RNA and oligonucleotides),
- -Ethidium homodimer-2 #FP-671255A, that has preferential affinity and fluorescence when bound to DNA that bound to RNA
- **-Ethidium monoazide, Bromide** #FP-48256A, which selectively labels DBA in dead cells even mixed to living cells
- **Propidium iodide** (**PI**) #FP-31238B, closely related to Ethidium Bromide, commonly used to selectively stain dead cells in a cell population and also used as a nuclear or chromosome counterstain in multicolour fluorescent imaging.
- •Other Nucleic acids stains and counter stains: DAPI / Hoechst, 7-AAD, Acridine Orange Ask for our non-muagenic DNA stains.
- Annexin V FluoProbes® 488, FP-BH9390
- IDetectTM FISH probes

- Calcein AM, FP-895514
- EdU cell proliferation assay, FP-MM982A

References

- Colin D. & Monteil H., Control of the Oxidative Burst of Human Neutrophils by Staphylococcal Leukotoxins, *Infection and Immunity*, p. 3724-3729, Vol. 71, No. 7 (2003) Article
- Marsollier L. et al., Aquatic Insects as a Vector for Mycobacterium ulcerans, Applied and Environmental Microbiology, p. 4623-4628, Vol. 68, No. 9 (2002) Article
- Roye O. et al., Dermal Endothelial Cells and Keratinocytes Produce IL-7 In Vivo After Human Schistosoma mansoni Percutaneous Infection, The Journal of Immunology, 161: 4161-4168 (1998) Article

Ordering information

Catalog size quantities and prices may be found at http://www.interchim.com Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask: FluoProbes[®] / Interchim; Hotline: +33(0)4 70 03 73 06

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