



Ethidium Bromide Solution, 10 mg/ml

Catalog Number
161-0433

BIO-RAD

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Section 1

Introduction

Bio-Rad's ethidium bromide solution increases safety in laboratory procedures by eliminating the handling of powdered ethidium bromide, a known carcinogenic reagent. A liquid dropper is provided with the solution to eliminate contamination of pipettes and pipette tips. The liquid dropper dispenses approximately 50 μ l per drop.

1.1 Specifications

Contents	Ethidium bromide solution, 10 mg/ml, 10 ml
Application	Agarose and polyacrylamide gel staining Large scale plasmid preparation using cesium chloride gradients
Storage	May be stored indefinitely in a lightproof container at room temperature

Section 2 Instructions for Use

Ethidium bromide is used to visualize DNA in agarose gels and in many cesium chloride gradient protocols. The 10 mg/ml ethidium bromide stock solution can be diluted for gel staining or used as provided for CsCl gradient protocols.

Caution: Ethidium bromide is a toxic chemical and a mutagen. It causes eye and skin irritation.

Wear gloves at all times and wash contaminated skin with water. Refer to Section 3 of this manual for additional Health Hazard information.

2.1 Gel Staining Instructions

Make a 0.5 µg/ml working solution according to the volume required:

0.5 µg/ml (1 liter)	0.5 µg/ml (200 ml)
Add one drop (50 µl) of 10 mg/ml ethidium bromide solution to 1000 ml ddi water	Add 10 µl of 10 mg/ml ethidium bromide solution to 200 ml ddi water

Soak the gel for 15 minutes with gentle agitation. Longer staining times will result in high background. Rinse the gel with ddi water and destain with fresh ddi water for 15 minutes with gentle agitation. At this point, the gel should be ready for photographing, although another 15 minute rinse with fresh ddi water will reduce background further.

2.2 CsC1 Gradient Instructions

Use 10 mg/ml ethidium bromide solution as provided. Add 0.8 ml of ethidium bromide solution for every 10 ml of cesium chloride/DNA solution to yield a final ethidium bromide concentration of 740 µg/ml.¹

1. Maniatis, T., Fritsch, E.F. and Sambrook, J. Molecular Cloning: A Laboratory Manual, Cold Spring Harbor Laboratory (1989).

Section 3 Health Hazards

Ethidium bromide is a toxic chemical and a mutagen. It causes eye and skin irritation. Wear gloves at all times and wash contaminated skin with water. Clean up liquid spills by absorbing the liquid with absorbent material. Spray the area with a 10% bleach solution, clean up with absorbent material, rinse with water, and dry the area with paper towels. Refer to the Risk and

Safety Phrases and the MSDS in this manual for additional information.

3.1 Risk and Safety Phrases

Hazardous products are marked with Hazard Symbols and Risk and Safety Phrases in accordance with the rules of the European Community Commission. Refer to the catalog for a complete listing of Hazard Symbols and Risk and Safety Phrases.

R 46

S 44, 53

EINECS 2149846

RTECS SF7950000

CASNr 1239-45-8

For laboratory use only.

May cause heritable genetic damage.
If you feel unwell, seek medical advice (show the label where possible).
Avoid exposure - obtain special instructions before use.

Kann vererbare Schäden verursachen.
Bei Unwohlsein ärztlichen Rat Einholen. Wenn möglich dieses Etikett vorzeigen.
Exposition vermeiden - vor Gebrauch besondere besondere Anweisungen einholen.

Peut causer des altérations génétiques héréditaires.
En cas de malaise consulter un médecin (si possible lui montrer l'étiquette).
Exposition vermeiden - vor Gebrauch besondere Anweisungen einholen.

Può provocare alterazioni genetiche ereditarie.

In caso di malessere consultare il medico (se possibile, mostrargli l'etichetta).
Evitare l'esposizione - procurarsi speciali istruzioni prima dell'uso.

Section 4 Ordering Information

Catalog Number	Description
161-0433	Ethidium Bromide Solution , 10 mg/ml
161-0430	Ethidium Bromide Tablets , 10 x 10 mg

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4006020 Rev B