#### **Ethidium Bromide**

# Ethidium Bromide containing buffer :

#### Step 1

Tear open the package and take out the ALPHAGEN EtBr Destroyer Bag. Use the product immediately or seal it into a ziplock bag to avoid prolonged exposure to the air.

# Step 2

Put the EtBr Destroyer into the EtBr-containing buffer. Completely submerge the bag so that the entire Destroyer bag is in the solution.

# **Step 3**Destroyer Working Timetable

EtBr- containing Quantity	2mg/3L	5mg/3L	10mg/3L	20mg/3L	30mg/3L
Working Time	16hrs	30hrs	3 days	5 days	6 days

#### Step 4

When the treated buffer becomes clear, please use a UV light (254nm) to observe the EtBr-content remaining. If exposure to the UV light displays no fluorescence and the O.D. value is equal to that of d.d.H2O it means that the EtBr containing buffer has been totally destroyed.

#### Step 5

The ALPHAGEN EtBr Destroyer Bag has absorbed and destroyed all of the EtBr content in the liquid. Following treatment the bag can be thrown away as a non-hazardous item in compliance with the local waste removal regulations.

# **Ethidium Bromide containing gels:**

#### Step 1

Tear open the package and take out the ALPHAGEN EtBr Destroyer Bag onto the container which fills with 3L d.d.H2O

#### Step 2

30 minutes later, you can drop the EtBr-contaminated gels into this container filling with the solution of ALPHAGEN EtBr Destroyer Bag.

#### Step 3

You can drop as many as gels into the container during the 6 months period, but the total amount of EtBr in all gels can't be over 30mg and the solution of ALPHAGEN EtBr Destroyer Bag has to cover the whole gels. The last gel dropped into the container only can be thrown away after 24 hours treatment.

# Step4

When the treated gel becomes clear, please use the UV light box (UV Wavelength 254nm) to ensure the Ethidium Bromide has been totally destroyed.

# Step 5

After 6 months, no matter how much EtBr has been destroyed, the solution of ALPHAGEN EtBr Destroyer Bag can't be used any more. The users need to clean up the container for another new solution.

#### Step 6

After gels containing EtBr which have been destroyed can be collected as the non-hazardous item in compliance with the local waste removal regulations.

#### SYBR Green I

# **Buffer containing SYBR Green I:**

Use the same procedure as for the Ethidium Bromide containing buffer. However please note that 1.) The decontamination time is different to that of Ethidium Bromide containing buffer, and 2.) You must use UV light box (wavelength 488nm) to observe SYBR Green I.

# Gels containing SYBR Green I:

The procedure is the same as that of the Ethidium Bromide containing gels. However please note that 1.) The decontamination

time is different to that of Ethidium Bromide containing gels, and 2.) You must use UV light box (wavelength 488nm) to observe SYBR Green I.

# **SYBR Gold**

# **Buffer containing SYBR Gold:**

Use the same procedure as for the Ethidium Bromide containing buffer. However please note that 1.) The decontamination time is different to that of Ethidium Bromide containing buffer, and 2.) You must use UV light box (wavelength 488nm) to observe SYBR Gold.

## Gels containing SYBR Gold:

The procedures are the same as the usage for Ethidium Bromide containing gels. However please note that 1.) The decontamination time is different to that of Ethidium Bromide containing gels, and 2.) Please use the UV light box (wavelength 488nm) to observe the SYBR Gold.

#### **SYPRO Orange**

#### **Buffer containing SYPROOrange:**

Use the same procedure as for the Ethidium Bromide containing buffer. However please note that 1.) The decontamination time is different to that of Ethidium Bromide containing buffer, and 2.) You must use UV light box (wavelength 488nm) to observe SYPRO Orange.

# Gels containing SYPRO Orange:

The procedure is the same as that of the Ethidium Bromide containing gels. However please note that 1.) The decontamination time is different to that of Ethidium Bromide containing gels, 2.) Please use the UV light box (wavelength 488nm) to observe the SYPRO Orange.

#### **FEATURES**

#### 1. Effective:

ALPHAGEN EtBr Destroyer is a laboratory reagent intended for the removal and destruction of Ethidium Bromide contamination. This effect can be monitored and confirmed by UV light exposure whereby once the EtBr has been destroyed the fluorescence will disappear.

#### 2. Fast:

For general protection of uncontaminated area, spray the EtBr Destroyer on the entire working area, leave for about 5 minutes, then wipe it dry with paper towel. When dealing with more seriously contaminated liquid samples the EtBr Destroyer bag is an ideal solution. Three litters of double distilled H2O containing 30mg of Ethidium Bromide can be destroyed in a matter of days using ALPHAGEN easy-to-follow up protocol with the bag format.

# 3. Specific:

Two specific designs are for different purposes: Ethidium Bromide Destroyer bags and Ethidium Bromide Destroyer Spray

#### 4. Economical:

ALPHAGEN EtBr Destroyer Sprayer bottles can be refilled after use and the bags are available in both a 10 and 20 pack. In comparison to the costs associated with properly disposing of hazardous materials the EtBr Destroyer products save your money in the long run. You can even re-use your buffer after treatment! One of the big economical benefits of using this product is that after using the ALPHAGEN EtBr Destroyer, the oncecontaminated buffer can be filtrated and use again without worry.

#### 5. Safe:

ALPHAGEN EtBr Destroyer has been demonstrated by Ames test to safely and effectively destroy EtBr without any mutagenic effect. The AMES test result data supports that the genotoxicity of EtBr contaminated solution, treated by both the ALPHAGEN EtBr Destroyer Band and Sprayer was reduced significantly and a negative result was determined.



ALPHAGEN EtBr Destroyer —
BAG
Degrades EtBr
Degrades SYBR Green
Degrades SYBR Gold
Degrades SYBR Orange

Description	Cat. No.
ALPHAGEN EtBr Destroyer Bag: 20 pack	APEBD 001
ALPHAGEN EtBr Destroyer Bag: 10 pack	APEBD 001-1
ALPHAGEN EtBr Destroyer Sprayer Pack: 2 x 200ml bottles and 1 sprayer head	APEBD 002
ALPHAGEN EtBr Destroyer Supplement: 2 X 200ml refill bottles, no sprayer head	APEBD 002-1
ALPHAGEN EtBr Destroyer Supplement: 1 x 1L refill bottle, no sprayer head	APEBD 002-2
ALPHAGEN EtBr Destroyer Bag & Sprayer Starter Kit: 5 bags, 1 x 200ml bottle, & 1 sprayer Head	APEBD 003



# ALPHAGEN EtBr Destroyer—BAG PROTOCOL

ALPHAGEN EtBr Destroyer is a specifically designed reagent effectively degrade and destroy Ethidium Bromide and result in both non-fluorescence and non-mutagenic remain. The product also has a proven effectiveness at destroying SYBR Dye from materials after use.

ALPHAGEN EtBr Destroyer is provided in two different formats for the treatment of both solid and liquid Ethidium Bromide contaminant. The ready pack ALPHAGEN EtBr Destroyer Bag is idea for the treatment of liquid Ethidium Bromide contaminant while Sprayer can be used for the treatment of solid contaminant waste including electrophoresis gels, glassware, paper towels, gloves, laboratory equipment, bench surface etc.

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