

CERTIFICATE OF ANALYSIS

# IPTG, dioxane-free

#R0393      25 g

Lot:

Formula:             $C_9H_{18}O_5S$   
Molecular Weight: 238.3

Store at 4°C

## Description

The IPTG (isopropyl- $\beta$ -D-thiogalactopyranoside) is a highly stable synthetic analog of lactose. It inactivates the *lac* repressor and induces synthesis of  $\beta$ -galactosidase, an enzyme that promotes lactose utilization. The IPTG is used to induce the expression of cloned genes which are under control of the *lac* operon. It is used in conjunction with X-Gal to determine the *lac* phenotype in blue/white colony screening in cloning experiments.

## Note

- Preparation of 23.83 mg/ml (100 mM) stock solution of IPTG in 0.22  $\mu$ m filtered (or sterile) water is recommended.
- For blue/white screening, 0.1 mM final IPTG concentration in LB (Luria Broth) media is recommended.

## QUALITY CONTROL

Dioxane-free.

Greater than 99% purity is confirmed by HPLC

Functionally tested in the blue/white colony screening.

Quality authorized by:

 Jurgita Zilinskiene

## SAFETY INFORMATION



**IPTG**

**Xn** Harmful

### **Risk phrases**

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

### **Safety phrases**

S9 Keep container in a well-ventilated place.

S22 Do not breathe dust.

S36/37 Wear suitable protective clothing and gloves.

S60 This material and its container must be disposed of as hazardous waste.

### **PRODUCT USE LIMITATION.**

This product is developed, designed and sold exclusively *for research purposes and in vitro use only*. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.

Please refer to [www.fermentas.com](http://www.fermentas.com) for Material Safety Data Sheet of the product.

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