

CERTIFICATE OF ANALYSIS

IPTG, dioxane free

#R0391 1 g

Lot:

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

Store at -20°C

Description

The IPTG (isopropyl- β -D-thiogalactopyranoside) is a highly stable synthetic analog of lactose. It inactivates the *lac* repressor and induces synthesis of β -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

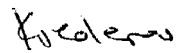
- Preparation of 23.83 mg/ml (100 mM) stock solution of IPTG in 0.22 μ m filtered (or sterile) water is recommended.
- For blue/white screening, 0.1 mM final IPTG concentration in LB (Luria Broth) media is recommended.

QUALITY CONTROL

Dioxane-free.

Greater than 99% purity is confirmed by HPLC

Functionally tested in the blue/white colony screening.

Quality authorized by:  Rimantas Kvederas

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 for Material Safety Data Sheet of the product.

(2) Revised 01.03.2007