IPTG (Isopropyl-ß-D-thiogalactopyranoside)

Applications
- Blue/white colony screening
- Expression of cloned genes that are under control of the lac promoter

Description
IPTG (isopropyl-beta-D-thiogalactopyranoside) is a highly stable synthetic analogue 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.

Quality:
- Dioxane-free.
- Greater than 99.8 % purity confirmed by HPLC
- Functionally tested in blue/white colony screening

Usage:
Preparation of stock solution:
Dissolve IPTG in water to a final concentration of 200 mg/ml. Sterilize solution using a 0.2 µm filter, dispense in aliquots, and store at –20°C. The sterilized solution is usually stable for several months when stored at –20°C.

IPTG should be used at a final concentration of 250–350 µg/ml in culture plates, top agar, or liquid culture. Alternatively, an appropriate amount of IPTG can be spread onto the surface of an agar plate and allowed to dry before inoculating with bacterial culture.

Ordering information:

Cat.-no	Description	Amount
406-010	IPTG	1 g
406-011	IPTG	5 g
406-012	IPTG	5x5 g