



Product Specifications

IPTG (Isopropyl β -D-thiogalactopyranoside)

<u>Catalog #</u>	<u>Size</u>
IB02100	1gm
IB02105	5gm
IB02125	25gm

Physical Specifications

CAS#	367-93-1
Formula Weight	238.31
Molecular Formula	$C_9H_{18}O_5S$
Purity	Min. 99.0%
Melting Point	110-114°C
IR (KBr)	Conforming as Standard
Dioxane (GLC)	< 1ppm

Molecular Biology Specifications

Colorimetric Transformation Assay Pass

Recommended Use

IPTG is an inducer of β -galactosidase activity in *E. coli*. It is commonly used in conjunction with X-GAL to detect lac gene expression in cloning applications, thus allowing detection of recombinant molecules.

Prepare a stock solution of IPTG at 0.1M (23.8 mg/mL) in sterile distilled water and filter sterilize through a 0.22 micron disposable filter. To either of the below solutions add 3ml/L IPTG stock solution. When pouring plates add 15gm bacto-agar per liter.

- 1). **10X M9 Salts Solution:**
- | | |
|------|-------------|
| 60 g | Na_2HPO_4 |
| 30 g | KH_2PO_4 |
| 5 g | NaCl |
| 10 g | NH_4Cl |

Adjust the pH to 7.4, add water to a final volume of 1L and autoclave.

For M9 media add:

100ml	10X M9 Salt Solution
1ml	0.01M $CaCl_2$
2ml	1.0M $MgSO_4$

Adjust to a final volume of 1 liter with distilled water.

Supplement with (optional):

0.2%	Casamino Acids
0.4%	Glucose
40 mg/ml	Thiamine-HCL

- 2). **2X YT Media:**
- | | |
|--------|---------------|
| 16 g/L | Tryptone |
| 10 g/L | Yeast Extract |
| 5 g/L | NaCl |

Storage

Store desiccated at $-20^\circ C$. Warm to room temperature before opening. Keep tightly sealed.

Warning

Irritant. Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Wash thoroughly with water after handling. See Material Safety Data Sheet for additional information.

FOR RESEARCH AND DEVELOPMENT PURPOSES ONLY

5/14/2008