

Product Specifications



SCIENTIFIC

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IPTG (Isopropyl β -D-thiogalactopyranoside)

Product Number

Size

IB02100	1gm
IB02105	5gm
IB02125	25gm

PHYSICAL SPECIFICATIONS

Molecular Formula	C ₉ H ₁₈ O ₅ S
Molecular Weight	238.31
Purity	99.0% Min.
Melting Point	110 - 114°C
IR (KBr)	Conforming as Standard
Dioxane (GLC)	< 1ppm
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 (23.8mg/ml) in sterile distilled water and filter sterilize through a 0.22 micron disposable filter. Add 3ml/L IPTG of stock solution to either of the solutions below. When pouring plates add 15gm bacto-agar per liter.

1.) 10X M9 Salts Solution	60gm Na ₂ HPO ₄
	30gm KH ₂ PO ₄
	5gm NaCl
	10gm NH ₄ Cl

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

M9 Salts Solution	100ml 10X M9 Salt Solution
	1ml 0.01M CaCl ₂
	2ml 1.0M MgSO ₄

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

Supplement with (optional):	0.2% Casamino Acids
	0.4% Glucose
	40mg/ml Thiamine-HCl

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

FOR RESEARCH AND DEVELOPMENT PURPOSES ONLY

CAS NO.

CAS# 367-93-1

STORAGE

Store desiccated at -20°C. Warm to room temperature before opening. Keep tightly sealed.

WARNING

Classification: Acute Toxicity (Oral) - 4
Acute Toxicity (Dermal) - 4
Acute Toxicity (Inhalation) - 4
Serious Eye Damage/Eye Irritation - 2

Hazard Statements: H302-Harmful if swallowed • H312-Harmful in contact with skin • H319-Causes serious eye irritation • H332-Harmful if inhaled

Precautionary Statements: P264-Wash face, hands, and any exposed skin thoroughly after handling • P270-Do not eat, drink, or smoke when using this product • P261-Avoid breathing dust/fume/gas/mist/vapors/spray • P271-Use only outdoors or in a well-ventilated area • P280-Wear protective gloves/protective clothing/eye protection/face protection • P302+P352-IF ON SKIN: Wash with plenty of water • P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present, and easy to do so. Continue rinsing • P312-Call a POISON CENTER or doctor if you feel unwell • P362-Take off contaminated clothing and wash it before reuse • P304+P312-IF INHALED: Remove person to fresh air and keep comfortable for breathing • P301+P312-IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell • P330-Rinse mouth • P501-Dispose of contents/container to an approved waste disposal plant.



WARNING!

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