

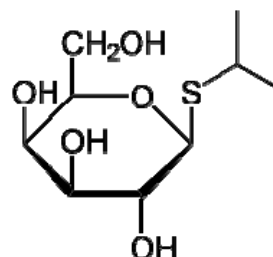
## IPTG (max 5ppm dioxane)

#GAB01.0005  
(for research only)

<b>Product:</b>	IPTG (Isopropyl β-D-thiogalactopyranoside) is a lactose analog that mimics allolactose, which triggers transcription of the lac operon by inactivation of the lac repressor. As such, IPTG can be used to induce protein expression of heterologous proteins that are encoded by genes under the control of the lac operator. Moreover, it is widely used in combination with X-Gal in blue/white screening assays of bacteria harbouring recombinant vectors. GRiSP's IPTG is at least 99% pure and has an extremely low content of dioxane, a compound that has a negative impact on normal cell function.
<b>Quantity:</b>	5g
<b>Appearance:</b>	White powder.
<b>Storage:</b>	2°C – 8°C for at least 3 years.
<b>Preparation:</b>	IPTG is effective at concentrations ranging from 0.1-1.0 mM. Prepare a stock solution in the range of 0.1M – 1M (1000x) using ultrapure water and filter sterilize. Aliquot and store at room temperature or 4°C for up to 1 month. For longer periods, store at -20°C.

### Specifications:

Formula: C<sub>9</sub>H<sub>18</sub>O<sub>5</sub>S  
MW: 238,8 g/mol  
Purity: >99% (HPLC, on dry basis)  
Water content: <1% (Karl Fischer)  
Melting point: 112°C (± 2°C)  
Solubility (water): 250mg/ml  
Heavy metals (Pb): < 5ppm  
1,4-dioxane: not detected



## ORDERING INFORMATION – Molecular Cloning – Common Reagents

Reference #	Product Name	Quantity
GAB01.0005	IPTG (max 5 ppm dioxane)	5 g
GAB02.0005	X-Gal	5 g
GAB03.0005	Ampicillin (sodium salt)	5 g
GAB04.0005	Kanamycin (sulphate)	5 g
GAB05.0005	Chloramphenicol	5 g
GAB06.0005	Carbenicillin (disodium salt)	5 g
GAB07.0005	Tetracycline (hydrochloride)	5 g
GAB08.0005	Gentamycin powder	5 g

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