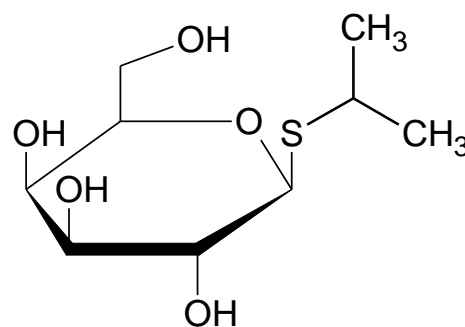


# LU5004

## IPTG, Ultrapure, Dioxane-free

IPTG (Isopropyl 1-thio-β-D galactopyranoside) induces the transcription of the gene coding for β-galactosidase, an enzyme that promotes lactose utilization, by binding and inhibiting the *Lac* repressor. IPTG is widely used as it cannot be metabolized by *E. coli*, so its concentration remains constant through the *in vivo* study. We offer ultrapure, analytical-grade IPTG (>99.5% purity).



### Specification

Formula:	C <sub>9</sub> H <sub>18</sub> O <sub>5</sub> S
Molecular Weight:	238.30 g/mol
CAS:	[367-93-1]
Purity:	> 99.5% (HPLC, A220)
Appearance:	White crystalline powder
Specific rotation (20°C, c=1, H <sub>2</sub> O):	-31 to -33°
IR:	Standard
Water content:	0.5% max. (KF)
Dioxane-free:	Dioxane is not used for preparing IPTG
Solubility in water:	>10% at 20°C
pH 1% solution:	5.5-6.5
Solution (3% in H <sub>2</sub> O, 21°C):	Clear, colorless
Solution (20% in EtOH, 21°C):	Clear, colorless
Storage:	Store at 4°C and keep dry. Warm to room temperature before opening bottle. Protect from light.

### Ordering Information

Item	Size	Cat-No.
Ultrapure IPTG (> 99.5%)	10 g	LU5004-010
Ultrapure IPTG (> 99.5%)	25 g	LU5004-025