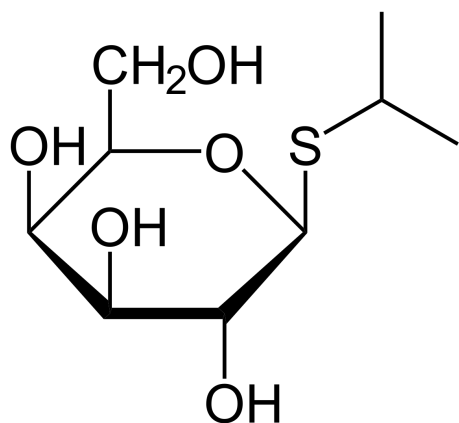


1M IPTG Solution Datasheet



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 LacI repressor. IPTG is widely used as it cannot be metabolized by *E. coli* so its concentration remains constant through the in vivo study.

First of its kind, the Protein Ark 1M IPTG Solution is shipped at room temperature, without compromising purity and performance!

Features

- >99.5% purity by HPLC
- Dioxane-free, animal-free
- Solution is shipped ready for use (filter sterilized & de-gased)
- Also available as a powder

Recommended Uses

- Induces lac operon activity
- On agar plates with X-gal for blue/white colour screening when cloning (0.2ml)
- Add to liquid bacterial cultures to induce high levels of protein expression (1ml)

Specifications

Empirical Formula	C ₉ H ₁₈ O ₅ S
Molecular Weight	238.8
Format sold in	1M Solution in Water
Melting Point	112-113°C
Purity	>99% by HPLC
Storage	-20°C

Product Citations

1. Ali F,R. et al. (2010) Methods in Molecular Biology vol. 628
2. Prabhakar, V., et al. (2009) FEBS Lett. 583(6), 983-991.
3. Chan, C-H., et al. (2008) Gen. 9(4), 1067-1070.
4. Hamblin, K., et al. (2008) Mol. Microbiol. 68(6), 1395-1405
5. Maruta, F., et al. (2007) Drug Targeting 15(4), 311-319.
6. Ross, P.J., et al. (2004) Infect. Immun. 72(3), 1568-1579.
7. Meng, G. & Fütterer, K. (2003) Nat. Struct. Biol. 10, 935-941.
8. J. Sambrook, D. W. Russell. (2001) Cold Spring Harbor Laboratory Press A1.27.pp. 1.124-1.125



Caution

Store at -20°C. Avoid repeated freezing/thawing. For Research use only.



Ordering Information

Product	Units	Order Code
1M IPTG Solution (5 x 0.2ml; >99.5% purity)	5 x 0.2ml	PAL-IPTG-200-5
1M IPTG Solution (5 x 1ml; >99.5% purity)	5 x 1ml	PAL-IPTG-1000-5
1M IPTG Solution (100 x 0.2ml; >99.5% purity)	100 x 0.2ml	PAL-IPTG-200-100
1M IPTG Solution (100 x 1ml; >99.5% purity)	100 x 1ml	PAL-IPTG-1000-100