



IPTG (Isopropyl 1-thio- $\beta$ -D galactopyranoside) induces the transcription of the gene coding for  $\beta$ -galactosidase, an enzyme that promotes lactose utilization, by binding and inhibiting the Lacl 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 Neo Biotech 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 colourscreening when cloning (0.2ml)
- Add to liquid bacterial cultures to induce highlevels of protein expression (1ml)

## Specifications

Empirical Formula	$C_9H_{18}O_5S$	
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. 6282.
- 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 (1ml; >99.5% purity)	1ml	NB-45-00028-5x200ul
1M IPTG Solution (5ml; >99.5% purity)	5ml	NB-45-00028-5ml
1M IPTG Solution (20ml; >99.5% purity)	20ml	NB-45-00028-20ml
1M IPTG Solution (100ml; >99.5% purity)	100ml	NB-45-00028-100ml