



## **IPTG**

**Catalog No: tcsc3040** 

Available Sizes
ze: 1g
ze: 5g
Specifications
AS No: 57-93-1
ormula: H <sub>18</sub> O <sub>5</sub> S
<b>hthway:</b> hers
hers
urity / Grade: 98%
olubility: MSO : ≥ 60 mg/mL (251.78 mM)
ternative Names: opropyl β-D-thiogalactoside

## **Product Description**

238.3

**Observed Molecular Weight:** 

IPTG is a molecular mimic of allolactose, a lactose metabolite that triggers transcription of the lac operon, and it is therefore used to induce protein expression where the gene is under the control of the lac operator.





*In Vitro:* IPTG uptake by E. coli can be independent of the action of lactose permease, since other transport pathways are also involved. At low concentration, IPTG enters cells through lactose permease, but at high concentrations (typically used for protein induction), IPTG can enter the cells independently of lactose permease<sup>[1]</sup>.

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!