

IPTG

Catalogue No.: abx461027

Isopropyl-beta-D-thiogalactopyranoside (IPTG) is a chemical analogue of galactose, which cannot be hydrolysed by the enzyme beta-Galactosidase. It induces the *E. coli lac* operon activity by binding and inhibiting the *lac* repressor without being degraded. Genes controlled by the *lac* or *tac* promoter/operator sequences are expressed to high levels in the presence of IPTG. Melting point: 112-113 °C.

Target: IPTG**Recommended dilutions:** For blue/white screening, a 0.1 mM final IPTG concentration in Luria Broth (LB) media is recommended.**Form:** Solid**Purity:** ≥ 99% (HPLC)**Reconstitution:** Reconstitute in DNase-free and RNase-free water (18.2 MΩ) to the desired concentration, then filter through a 0.22 μm filter.**Storage:** Store at -20 °C. Avoid repeated freeze/thaw cycles.**Validity:** Up to 12 months.**Molecular Weight:** 238.3 g/mol**Molecular Formula:** C₉H₁₈O₅S**Buffer:** Not applicable.**CAS Number:** 367-93-1**Note:** This product is for research use only.
Not for human consumption, cosmetic, therapeutic or diagnostic use.