

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 USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.