



Isopropyl β -D-1-thiogalactopyranoside (IPTG)

Cat No# C3201 – 5 g | C3202 – 10 g | C3203 – 100 g

Storage at 2-8°C

INFORMATION

Description: Isopropyl β -d-1-thiogalactopyranoside (IPTG) is a molecular biology reagent. This compound 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. IPTG, unlike allolactose, is not hydrolyzable by β -galactosidase. Therefore, its concentration remains constant during an experiment. For induction, a sterile, filtered 1 M solution of IPTG is typically added by 1:1000 dilution into an exponentially growing bacterial culture, to give a final concentration of 1 mM. However, different concentrations of IPTG may also be used.

CAS: 367-93-1

M.W.: 238.32

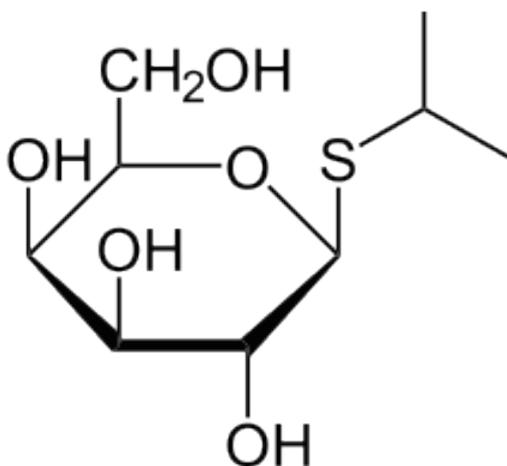
Formula: C₉H₁₈O₅S

Appearance: White Solid

Purity: >99% (TLC)

Solubility: Water, methanol.

CHEMICAL STRUCTURE



PRODUCT USE LIMITATION

These products are intended for research use only.