

IPTG Solution (1M)

Cat. # P1011-10, P1011-100, P1011-250

Also Known as: isopropyl- β -D-thiogalactopyranoside

CAS: 367-93-1

MW: 238.3 Da

Formula: $C_9H_{18}O_5S$

Source: Synthetic

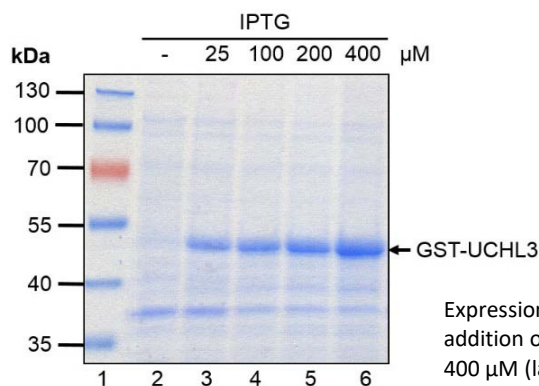
Form: 1 M solution in distilled water, filtrated through a 0.22 micron filter.

Solubility: Up to 1 M solution (238.3 g/l) can be prepared in water.

Quality Assurance: >99% by HPLC

Description: IPTG, Isopropyl β -D-1-thiogalactopyranoside, binds the lac repressor and induces expression of β -galactosidase in *E. coli*. IPTG is widely used to induce the expression of cloned genes under the control of the lac operon and to screen blue/white colony in X-gal plate.

Image(s):



Expression of GST-UCHL3 in BL21 (DE3) cells was induced by the addition of 25 μ M (lane 3), 100 μ M (lane 4), 200 μ M (lane 5) or 400 μ M (lane 6) IPTG at 37 $^{\circ}$ C for 2 hours. Lane 2 without IPTG.

Storage: Shipping by wet ice package. Store at -20 $^{\circ}$ C upon receiving.

Literature: J. Sambrook, D. W. Russell, Molecular Cloning: A Laboratory Manual, the Third edition (Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York, A1.27, 2001) pp. 1.124-1.125.

Note: Upon receiving, aliquot the stock to an appropriate volume according your use and store under -20 $^{\circ}$ C. Avoid multiple freeze and thaw cycles.

