



DATA SHEET

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> IPTG

cat. no.	amount	note
STS-IPTG1	1g	powder
STS-IPTG5	5g	powder
STS-IPTG10	10g	powder
STS-IPTG25	25g	powder
STS-IPTG100	100g	powder

IPTG is commonly used in cloning procedures that require induction of β -galactosidase activity. It is used in conjunction with X-Gal or Blue-Gal in blue-white selection of recombinant bacterial colonies that induce expression of the lac operon in *Escherichia coli*. IPTG functions by binding to the lacI repressor and altering its conformation, which prevents the repression of the β -galactosidase coding gene lacZ.

Chemical Name

Isopropyl- β -D-thio-galactopyranoside

Formulation

$C_9H_{18}O_5S$

Molecular Weight

238,3

Solubility

IPTG is soluble at 250 mg/ml in water and may be sterilized by filtration through a 0.22 μ m filter. The solution may be aliquoted and stored at -20°C .

Storage

Store dry at $0-5^\circ\text{C}$.

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IPTG solutions can be stored at room temperature for up to one month. When preparing culture plates, aliquots of X-Gal and IPTG may be added to the agar solution after it has been cooled to $\sim 45^\circ\text{C}$.

FOR RESEARCH USE ONLY