



DATA SHEET

> IPTG

<i>cat. no.</i>	<i>amount</i>	<i>note</i>
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 Blu-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°C.

The solution may be aliquoted and stored at -20 °C.

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 ~ 45 °C.

FOR RESEARCH USE ONLY