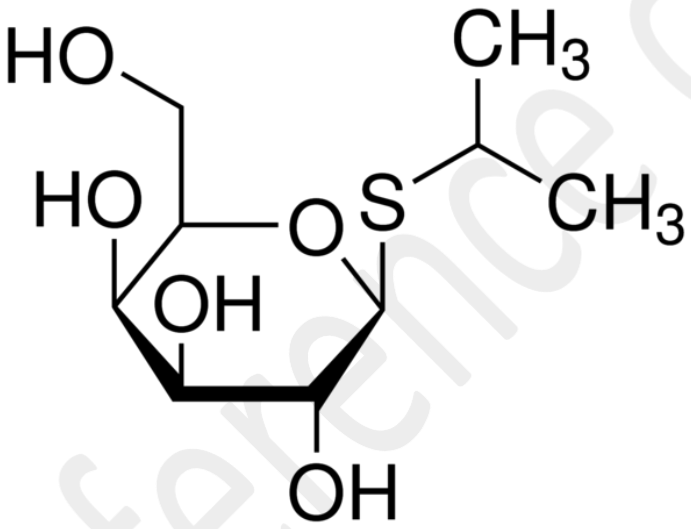
IPTG (Dioxan free) [367-93-1]

#Cat: NB-42-01685-1g **Size: 1g**

#Cat: NB-42-01685-5g **Size: 5g**

#Cat: NB-42-01685-10g **Size: 10g**



Product Information

Chemical Name:	Isopropyl 1-thio-Beta-D-galactopyranoside
Synonyms:	IPTG
Batch Molecular Formula:	$C_9H_{18}O_5S$
Batch Molecular Weight:	~238 (batch depending)
CAS No.:	[367-93-1]
Physical Appearance:	White to almost white solid crystal powder
Melting point:	110° - 114°C
pH:	(5% in water) 5.0 – 7.0
$[\alpha]D^{20}$ (c1; H2O):	-31.5° +/- 3.0°
Water content (KF):	<1%
1,4-Dioxan:	Not detected
Heavy metals:	≤5ppm

For Research use only

Neo Biotech
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Solvent and solubility

A stock solution (0.1 M) is prepared by dissolving IPTG in water with subsequent sterile filtration of the solution. The final concentration of IPTG in indicator plates should be 0.2 mM.
Soluble in water upto 50 mg/mL

Shipping and storage

Shipped ambient, store at -20°C protected from light and moisture

Biological activity

Non-metabolizable galactose analog.

Application

IPTG is commonly used in cloning procedures that require induction of β-galactosidase activity. It is used in conjunction with X- Gal or Bluo-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.

Analytical data

HPLC:	>99% pure