

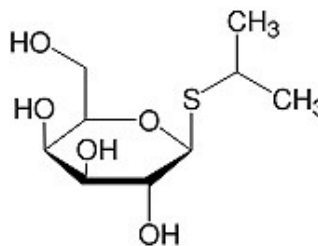
# Isopropyl-β-D-thiogalactopyranoside

research grade, dioxane-free

(IPTG, Isopropyl-1-thio-β-D-galactopyranoside)

$C_9H_{18}O_5S$  •  $M_r$  238.3 • CAS [367-93-1]

Analog of galactose, not split by β-galactosidase. Inducer of the lac operon in bacteria. Used in conjunction with X-Gal (5-bromo-4-chloro-indolyl-β-D-galactoside, cat. no. 15243) for detection of lac<sup>+</sup> colonies. Dissolve in H<sub>2</sub>O to 200 mg/ml, sterilize by filtration and store in aliquots at -20 °C. For detection of transformants, use in final concentration of 0.1 mM.



Purity (HPLC)	min. 98.0 %
[α] 20 °C/D (c=1 % in water)	-28.5 ° to -34.5 °
1,4-Dioxane	not detected

## References:

1. Donner, J. et al. (1982) J. Biol. Chem. **257**, 14826-9
2. Sambrook, Fritsch, Maniatis (1989) Molecular Cloning, Cold Spring Harbor Laboratory Press (4.33, 4.37-4.38, 1.8-1.9, 17.12-17.13, B.11)
3. Ed. Ausubel et al. (1994) Current Protocols in Molecular Biology, Massachusetts General Hospital & Harvard Medical School (1.4.3, 16.2.3, 1.15.1)