LKT Laboratories, Inc.

Isopropyl Thiogalactoside

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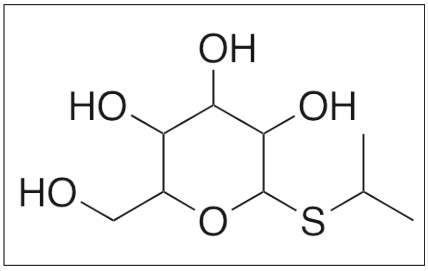
Product Information

Product ID I7356
CAS No. 367-93-1
Chemical Name



Synonym Isopropyl ß-D-thiogalactoside, IPTG, Isopropyl ß-D-1-thiogalactopyranoside

Formula $C_9H_{18}O_5S$
Formula Wt. 238.30
Melting Point 110-114˚C
Purity ≥98%
Solubility Soluble in water.

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
I7356	1 g	$82.90
I7356	5 g	$330.20
I7356	10 g	$571.60

Store Temp -20˚C
Ship Temp Ambient
Description Isopropyl thiogalactoside is an analog of galactose that is not cleaved by ß-galactosidase. Isopropyl thiogalactoside is a mimic of allolactose that induces activation of the *lac* operon, simulating protein expression.

References

Yu T, Liu W, Brinck M, et al. Multiplexed characterization of rationally designed promoter architectures deconstructs combinatorial logic for IPTG-inducible systems. Nat Commun. 2021 Jan 12;12(1):325. PMID: 33436562.

Colarusso A, Lauro C, Calvanese M, et al. Improvement of Pseudoalteromonas haloplanktis TAC125 as a cell factory: IPTG-inducible plasmid construction and strain engineering. Microorganisms. 2020 Sep 24;8(10):1466. PMID: 32987756.

Myung S, Park J, Han J, et al. Development of the mammalian expression vector system that can be induced by IPTG and/or lactose. J Microbiol Biotechnol. 2020 Aug 28;30(8):1124-1131. PMID: 32423185.

Marbach A, Bettenbrock K. lac operon induction in Escherichia coli: Systematic comparison of IPTG and TMG induction and influence of the transacetylase LacA. J Biotechnol. 2012 Jan;157(1):82-8. PMID: 22079752.

Hansen LH, Knudsen S, Sørensen SJ. The effect of the lacY gene on the induction of IPTG inducible promoters, studied in Escherichia coli and Pseudomonas fluorescens. Curr Microbiol. 1998 Jun;36(6):341-7. PMID: 9608745.