

## Certificate of Analysis

**PRODUCT:** **IPTG;**  
[i-Propyl-β-D-ThioGalactoPyranoside]; [Isopropyl-β-D-thiogalactopyranoside;  
Isopropyl β-D-1-thiogalactopyranoside; Isopropyl-β-D-thiogalactoside]  
**C<sub>9</sub>H<sub>18</sub>O<sub>5</sub>S, M.W. 238.3, CAS# [367-93-1]**

**PRODUCT NUMBER:** I-1312

**LOT NUMBER:** L1376

**APPEARANCE:** White crystalline powder

	<u>SPECIFICATIONS:</u>	<u>RESULTS:</u>
<b>ASSAY (HPLC):</b>	>99%	99.24%
<b>WATER (KF):</b>	<1%	0.20%

<b>OPTICAL ROTATION:</b>	$[\alpha]_D^{20} = -32^{\circ} \pm 1^{\circ} (c=1 \text{ in H}_2\text{O})$	-32.14°
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<b>pH:</b>	5.0 - 7.0	5.9
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<b>PURITY (TLC):</b>	≥99%	>99%
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<b>PURITY (HPLC):</b>	≥99%	99.27%
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<b>SOLUBILITY:</b>	Clear and colorless, In 5%, H <sub>2</sub> O	Conforms
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<b>MELTING POINT:</b>	108 - 114°C	111.0 – 114.0°C
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<b>DIOXANE* (GLC):</b>	<1 ppm	Conforms
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<b>IR (KBr):</b>	Conforming to structure	Conforms
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**COUNTRY of ORIGIN:** USA

**STORAGE & HANDLING:** Store desiccated at -20°C. **PROTECT FROM LIGHT & MOISTURE! HYGROSCOPIC! WARNING: HARMFUL!**

CAUTION: For research use only. Not for human or drug use. The pharmacological and toxicological properties of this product have not been fully investigated. Use caution when handling. Do not use this compound if you are not fully trained or are unaware of the hazards involved.

Verified: KLS