

CERTIFICATE OF ANALYSIS

Product ISOPROPYL-B-D-THIOGALACTOPYRANOSIDE (IPTG)

Product number I1401 Batch number 015747 Date of analysis 29-06-2020 Date of expiry 30-06-2025

Packaging and storage in a well-closed container under dry conditions between -25°C - -15°C

| Appearance | SPECIFICATION white powder | RESULT complies | UNITS | REMARKS |
|-------------------|------------------------------|-----------------|-------|------------------------|
| Solubility | soluble in water and ethanol | complies | | 5% in H ₂ O |
| Identification | conform | complies | | IR-spectrum |
| рН | 5.0 - 8.0 | 6.8 | | 5% in H ₂ O |
| Specific rotation | -30 — -34 | -30.62 | 0 | $C=1, H_2O$ |
| 1,4-Dioxane | ≤ 1 | complies | ppm | GC |
| Water | ≤ 1.0 | 0.29 | % | Karl Fischer |
| Assay | ≥ 99.0 | 99.62 | % | HPLC |

This certificate of analysis is conform the results of the manufacturer.

Conclusion: approved

Released by:

drs. M. van Wissen, pharmacist

Department of Quality Control Duchefa B.V.

Date: 12-10-2020

The buyer is responsible to test each batch to ensure the product is suitable for their specific purpose.

Duchefa Biochemie B.V.