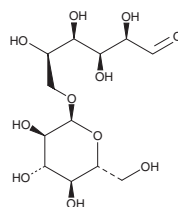


PRODUCT INFORMATION

Isomaltose

Item No. 20797

CAS Registry No.: 499-40-1
Formal Name: 6-O- α -D-glucopyranosyl-D-glucose
MF: C₁₂H₂₂O₁₁
FW: 342.30
Purity: $\geq 95\%$
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Isomaltose is supplied as a crystalline solid. A stock solution may be made by dissolving the isomaltose in the solvent of choice, which should be purged with an inert gas. Isomaltose is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of isomaltose in these solvents is approximately 5 and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of isomaltose can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of isomaltose in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Isomaltose is a glucose disaccharide with an α -(1 $\rightarrow$ 6) linkage, as opposed to the α -(1 $\rightarrow$ 4) linkage found in maltose. It can be liberated from dextran by dextranase and is hydrolyzed to D-glucose by isomaltase through an α -D-glucosidase-type action. Congenital sucrase-isomaltase deficiency is a rare autosomal intestinal disorder resulting from mutations affecting the gene encoding the proprotein from which sucrase and isomaltase are produced.¹

Reference

1. J.L. Marcadier, M. Boland, C.R. Scott, *et al.* Congenital sucrase-isomaltase deficiency: Identification of a common Inuit founder mutation. *CMAJ* **187**(2), 102-107 (2015).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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