

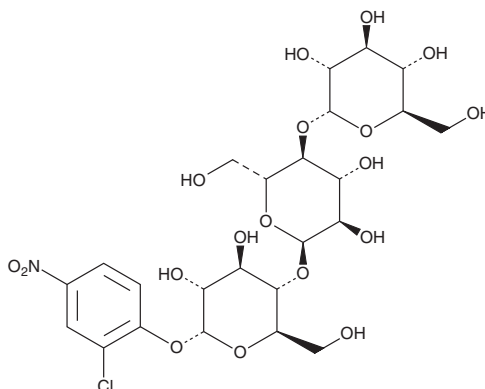
PRODUCT INFORMATION

2-Chloro-4-nitrophenyl α -D-maltotriose

Item No. 34459

CAS Registry No.: 118291-90-0
Formal Name: 2-chloro-4-nitrophenyl O- α -D-glucopyranosyl-(1 \rightarrow 4)-O- α -D-glucopyranosyl-(1 \rightarrow 4)- α -D-glucopyranoside

Synonym: CNP-G3
MF: C₂₄H₃₄ClNO₁₈
FW: 660.0
Purity: \geq 95%
UV/Vis.: λ_{max} : 291 nm
Supplied as: A solid
Storage: -20°C
Stability: \geq 2 years



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

Laboratory Procedures

2-Chloro-4-nitrophenyl α -D-maltotriose is supplied as a solid. A stock solution may be made by dissolving the 2-chloro-4-nitrophenyl α -D-maltotriose in the solvent of choice, which should be purged with an inert gas. 2-Chloro-4-nitrophenyl α -D-maltotriose is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 2-chloro-4-nitrophenyl α -D-maltotriose in these solvents is approximately 30 mg/ml. 2-Chloro-4-nitrophenyl α -D-maltotriose is also slightly soluble in ethanol.

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 2-chloro-4-nitrophenyl α -D-maltotriose can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 2-chloro-4-nitrophenyl α -D-maltotriose in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

2-Chloro-4-nitrophenyl α -D-maltotriose is a colorimetric substrate for α -amylases.¹ Upon hydrolysis by α -amylases, 2-chloro-4-nitrophenol is released which can be quantified by colorimetric detection at 405 nm as a measure of enzyme activity. 2-Chloro-4-nitrophenyl α -D-maltotriose has been used to characterize the activity of human pancreatic or salivary amylase.

Reference

1. Winn-Deen, E.S., David, H., Sigler, G., *et al.* Development of a direct assay for α -amylase. *Clin. Chem.* **34**(10), 2005-2008 (1988).

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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