ENZYMES

2-Chloro-4-Nitrophenylα-Maltotrioside (CNPG3)

CAT# CHNM-70-3821 CAS# 118291-90-0

SPECIFICATIONS

Appearance Off-white to pale yellow powder

Purity >95% by HPLC

Moisture (Karl Fisher) <5%
Other CNP Maltodextrins <5% total

(CNPG1, CNPG2, compound Y and GNPG4)

Free CNP <0.04%

ASSAY PRINCIPLE

Amylase acts on the CNPG3 in the following way:

10CNPG₃ α - amylase \rightarrow 9CNP + CNPG₂ + 9G₃ + G

 α -Amylase hydrolyzes CNPG3 to release chloro-nitrophenol and shorter chain chloro-nitrophenyl malto-oligosaccharides. The rate of formation of chloro-nitrophenol can be detected spectrophotometrically at 405nm to give a direct measurement of α -amylase activity.

APPLICATION

CNPG3 is a patented substrate for the determination of pancreatic α -amylase. The CNPG3 does not require the presence of auxiliary enzymes, as color is directly released as a result of a-amylase cleavage at the aglycone. CNPG3 is available from Sekisui Enzymes as the substrate alone, or as the 510(k) cleared automated Direct Amylase reagent with excellent liquid stability.

CHARACTERISTICS

Molecular formula $C_{24}H_{35}CINO_{18}$ Molecular weight660.12 g/mol

THE AMERICAS

Sekisui Diagnostics, LLC 4 Hartwell Place Lexington, MA 02421 Phone: 800 332 1042 Fax: 800 762 6311

INTERNATIONAL

Sekisui Diagnostics (UK) Limited Liphook Way, Allington Maidstone, Kent, ME16 0LQ, UK Phone: +44 1622 607800 Fax: +44 1622 607801 SEKISUI DIAGNOSTICS

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