

Pullulanase/Limit-Dextrinase Assay Kit (PULLG6 Method)

Product Information

Cat.No.

Kit-0753

Product Overview

PULLG6 assay for the measurement of pullulanase employs a water soluble defined substrate, namely 4,6-O-benzylidene-4-nitrophenyl-63- α -D-maltotriosyl-maltotriose (BPNPG3G3), coupled with the ancillary enzymes α -glucosidase and β -glucosidase. Upon hydrolysis of the substrate at the 1,6- α -linkage by pullulanase or limit-dextrinase, the released 4-nitrophenyl- β -maltotriose is immediately hydrolysed to glucose and 4-nitrophenol by the concerted action of the α -glucosidase and β -glucosidase enzymes in the reagent mixture. The reaction is terminated and phenolate ions are developed by addition of dilute alkali. The absorbance is read at 400 nm and the value obtained correlates directly with pullulanase activity.

Size

100 assays

Detection method Spectrophotometric at 400 nm

Features & Benefits

High sensitivity Suitable for manual and auto-analyser formats All reagents stable for >1 year after preparation

Assay time

10 min for pullulanase preparations 30 min for malt extracts containing limit-dextrinase

Sensitivity

0.18 U/mL for pullulanase preparations (50-fold dilution) 0.01 U/g for limit dextrinase in milled malt