

Native Rhizopus sp. Glucoamylase

Product Information

Cat#	DIA-190
Abbr	Glucoamylase (Rhizopus sp.)
Similar	Glucoamylase
Source	Rhizopus sp.
Description	Glucan 1,4-alpha-glucosidase is an enzyme located on the brush border of the small intestine with system name 4-alpha-D-glucan glucohydrolase. This enzyme catalyses the following chemical reaction: Hydrolysis of terminal (1->4)-linked alpha-D-glucose residues successively from non-reducing ends of the chains with release of beta-D-glucose. Most forms of the enzyme can rapidly hydrolyse 1,6-alpha-D-glycosidic bonds when the next bond in the sequence is 1,4.
Applications	This enzyme is useful for structural investigation of carbohydrates and for enzymatic determination of α -amylase when coupled with the related enzymes in clinical analysis.
Appearance	White amorphous powder (salt-free), lyophilized
Form	Freeze dried powder
Enzyme Commission Number	EC 3.2.1.3
Activity	30U/mg-solid or more
CAS No.	9032-08-0
pH Stability	pH 4.0-8.5 (25°C, 20hr)
Michaelis Constant	11 \pm 1.1 $\times 10^{-4}$ M (Maltose), 3.6 \pm 0.51 $\times 10^{-4}$ M (Maltotriose), 2.5 \pm 0.33 $\times 10^{-4}$ M (Maltotetraose), 1.6 \pm 0.02 $\times 10^{-4}$ M (Maltopentaose)
Specificity	This enzyme completely hydrolyzes soluble starch, amylopectin, glycogen, α -or β -limit dextrin, amylose, maltooligosaccharides and panose.
Optimum pH	4.5-5.0



Creative Enzymes

Diagnostic Enzymes

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Optimum temperature	60°C
Thermal stability	below 45°C (pH 5.5, 10min)
Stability	Stable at -20°C for at least 6 months
Synonyms	EC 3.2.1.3; glucoamylase; amyloglucosidase; gamma-amylase; lysosomal alpha-glucosidase; acid maltase; exo-1,4-alpha-glucosidase; glucose amylase; gamma-1,4-glucan glucohydrolase; acid maltase; 1,4-alpha-D-glucan glucohydrolase