



Creative Enzymes

Diagnostic Enzymes

Alpha-Amylase from *Bacillus subtilis*

Product Information

Cat#	DIA-497
Source	<i>Bacillus subtilis</i>
Description	Hydrolyzes α -1,4-glycosidic bonds in starch, randomly cleaving amylose and amylopectin into dextrans of various chain lengths and small amounts of low-molecular-weight sugars. This random depolymerization rapidly reduces starch paste viscosity ("liquefaction"), hence the name liquefying enzyme.
pH Stability	4.5-8.0
Optimum pH	5.2-6.2
Optimum temperature	60-70 °C
Thermal stability	35-90 °C
Stabilizers	Calcium ions enhance the stability of enzymatic activity. In the absence of Ca^{2+} , enzymatic activity is completely lost.
Unit Definition	One unit of α -amylase is the amount of enzyme required to release one μmole of p-nitrophenol from blocked p-nitrophenyl-maltoheptaoside per minute (in the presence of excess α -glucosidase) at pH 6.0 and 40 °C.
Storage	-20 °C, protected from light
Synonyms	Medium-temperature α -amylase

Product Overview

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