

α amylase

Cat. No. BAK-250

Lot. No. (See product label)

Introduction

Description

α-Amylase isolated from porcine pancreas is a glycoprotein.² It is a single polypeptide chain of approximately 475 residues containing 2 SH groups and four disulfide bridges and a tightly bound Ca²⁺ necessary for stability.^{3,4} Chloride ions are necessary for activity and stability⁵ The pH range for activity is 5.5 to 8.0, with the pH optimum at 7.6

Applications

α-Amylase is used to hydrolyze α bonds of α-linked polysaccharides, such as starch and glycogen. Product is from porcine pancreas and is type I-A. α-Amylase has been used in various plant studies, such as metabolism studies in Arabidopsis.

Synonyms

PPA

Product Information

Appearance

Appearance (Color): White to Light Yellow Appearance (Form): Suspension

Form

PMSF treated, saline suspension

EC Number

EC 3.2.1.1

CAS No.

9000-90-2

Molecular Weight

51-54 kDa

Activity

700-1400 units/mg protein (E1%/280)

Unit Definition

One unit will liberate 1.0 mg of maltose from starch in 3 min at pH 6.9 at 20 °C.

Storage and Shipping Information

Stability

α-Amylase is stable in 25 mM Tris-HCl, pH 7.5, with 100 mM KCl, at 0 °C or at -20 °C for at least 9 days.⁸ Another recommended storage condition is in 1 mM phosphate, pH 7.3, with 30 mM CaCl₂ at -15 °C.