

FOR RESEARCH ONLY!

07/19

Alpha-Amylase, Human Saliva

CATALOG NO:	P1455-1 1 KU
ALTERNATE NAMES:	1,4-alpha-D-Glucan-glucanohydrolase, ptyalin
MOL. WT.	~60,000
SOURCE:	Human Saliva
PURITY:	> 90% SDS-PAGE.
FORM:	Lyophilized
FORMULATION:	Lyophilized from 75 mM sodium chloride, 10 mM Tris, 1 mM calcium chloride, pH 7.2.
RECONSTITUTION:	Reconstitute in PBS at ≥ 100 units/mL. Further dilutions should be in the lyophilization buffer (75 mM sodium chloride, 10 mM tris chloride, 1 mM calcium chloride, pH 7.2) or a similar buffer. Calcium is important for the best activity and stability. Store in aliquots at -20°C
SPECIFIC ACTIVITY:	> 400 U/mg protein
CONCENTRATION:	> 0.2 mg protein/mg (Coomassie)
UNIT DEFINITION:	One unit will catalyze the hydrolysis of one micromole 2-chloro-4-nitrophenyl- α -D-maltotrioside to yield 2-chloro-4-nitrophenol per minute at 37°C .
STORAGE CONDITIONS:	Store at -20°C . Once reconstituted store in aliquots at -20°C . Avoid repeated freeze-thaw cycles.
DESCRIPTION:	Amylase is an enzyme that breaks starch down into sugar. Amylase is present in human saliva, where it begins the chemical process of digestion. Foods that contain much starch but little sugar, such as rice and potato, taste slightly sweet as they are chewed because amylase turns some of their starch into sugar in the mouth. Alpha-Amylase is an enzyme that hydrolyses alpha-bonds of large alpha-linked polysaccharides such as starch and glycogen, yielding glucose and maltose. It is being used by researchers as a barometer of the body's response to physical or psychological stress.
CONTAMINANTS:	Lipase: < 0.1% Protease: < 0.1% Ammonia: < 0.1 micromole/mg

RELATED PRODUCTS:

Alpha-Amylase Antibody (3925)
Amylase Activity Colorimetric Assay Kit (K711)
Alpha-Amylase Antibody (3014)
Alpha-Amylase, Human Pancreas (P1454)

FOR RESEARCH USE ONLY! Not to be used on humans.