

FOR RESEARCH ONLY!

rev 02/21

# Alpha-Amylase, Human Pancreas

<b>CATALOG NO:</b>	P1454-100 100 units
<b>ALTERNATE NAMES:</b>	AMY2A, AMY2, AMY2B, PA, Amylase, a-Amylase, 1,4-a-D-glucan glucanohydrolase, glycogenase $\alpha$ -amylase
<b>SOURCE:</b>	Human Pancreas
<b>FORM:</b>	Lyophilized protein
<b>FORMULATION:</b>	Lyophilized from Tris-chloride, sodium chloride and calcium chloride, pH 7.5.
<b>SPECIFIC ACTIVITY:</b>	$\geq 100$ U/mg protein
<b>CONCENTRATION:</b>	Lot specific
<b>UNIT DEFINITION:</b>	One unit will catalyze the hydrolysis of one micromole of 2-chloro-4-nitrophenyl-a-D-maltotrioxide to yield 2-chloro-4-nitrophenol per minute at 37 °C.
<b>STORAGE CONDITIONS:</b>	Store at -20 °C.
<b>DESCRIPTION:</b>	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. NIH study shows that Women with high levels of alpha amylase, indicating stress, are less likely to conceive.
<b>CONTAMINANTS:</b>	Lipase: $\leq 0.1\%$ GOT/AST: $\leq 0.01\%$ ALP: $\leq 0.01\%$ Protease: $\leq 0.01\%$
<b>RELATED PRODUCTS:</b>	Alpha-Amylase Antibody (3014) Amylase Activity Colorimetric Assay Kit (K711) Alpha-Amylase Antibody (3925)

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