


ALPHA-AMYLASE

Source:	Human Pancreas
Form:	Liquid
Buffer:	TRIS buffer containing NaCl ₂ , CaCl, Protease Inhibitor, and 0.1% Sodium Azide at pH 7.5
Concentration:	≥ 100 IU/mL
Purity:	Immunopure is ≥ 95% by SDS Page
Assay:	Assay performed on Roche Cobas c501
Storage:	2-8°C
Molecular Weight:	51.0- 54.0 kDa
Appearance:	Clear, colorless



Associated Products: Lipase: Partially Purified

Alpha-amylase is an oligosaccharide endoglycosidase, an enzyme that cleaves an internal glycosidic bond within a poly or oligosaccharide. In the case of alpha-amylase, 1,4 linkage between two glucose moieties, cleaving the C-O bond between the C1 carbon and the oxygen, is random.

Alpha-amylase requires calcium for activity, although complete activity only occurs in the presence of certain anions such as Cl⁻, Phosphate and others. Many tissues can produce alpha-amylase but the forms found in serum are most often from the pancreas and salivary glands. Several isoenzymes have been detected and characterized from these tissue sources. Alpha-amylase can be found in a variety of body fluids and they are some of the few enzymes that can be found in urine from healthy individuals. The main purpose in testing amylase, especially when the appropriate symptoms are present, is to diagnose pancreatitis and other primary and secondary pancreatic pathologies. This can be made more specific by testing for amylase isoenzymes specific to the pancreas. Testing of total amylase serves as a valuable diagnostic tool.