

**AR00016PU-N****Human Saliva Amylase Alpha**

<b>Alternate names:</b>	1, 4-alpha-D-glucan glucanohydrolase 1, AMY1A, Salivary alpha-amylase
<b>Quantity:</b>	1 kU
<b>Concentration:</b>	0.50 mg Protein/mg (Coomassie)
<b>Background:</b>	<p>Amylases are secreted proteins that hydrolyze 1,4 alpha glucoside bonds in oligosaccharides and polysaccharides. They catalyze the first step in digestion of dietary starch and glycogen. Alternative splicing results in multiple transcript variants encoding the same protein.</p> <p>Salivary Amylase is a digestive enzyme secreted by salivary glands, it consists of a single polypeptide chain with a molecular weight of 56kDa (family B) or 62kDa (family A), the difference in molecular weight being due to the presence or absence of a carbohydrate moiety.</p> <p>The total serum concentration of amylase is about 120g/L of which about 50% is salivary amylase.</p> <p>Although salivary amylase and pancreatic amylase share 95% amino acid sequence homology, they differ in molecular size, isoelectricpoint and antigenic properties.</p>
<b>Uniprot ID:</b>	<a href="#">P04745</a>
<b>NCBI:</b>	<a href="#">NP_001008219.1</a>
<b>GeneID:</b>	<a href="#">276</a>
<b>Species:</b>	Human
<b>Source:</b>	Saliva, Human Saliva
<b>Format:</b>	<b>State:</b> Lyophilized purified protein <b>Purity:</b> >90% by SDS-PAGE <b>Buffer System:</b> 75mM Sodium Chloride, 10mM Tris, 1mM Calcium Chloride, pH 7.2 <b>Preservatives:</b> None <b>Reconstitution:</b> Restore with Tris saline or other buffer to desired concentration.
<b>Description:</b>	<p>Amylase alpha, Human Saliva.</p> <p><b>Contaminants:</b> Lipase: &lt; 0.01%, Proteases: &lt; 0.01%, Ammonia: &lt; 0.01 µmole/mg</p> <p><b>Specific Activity:</b> 290 Units/mg. 570 Units/mg Protein. One unit will catalyze the hydrolysis of one micromole of malto pentaose, which through coupled reactions results in the formation of 5 micromoles of glucose-6-phosphate per minute at 37°C. Measured at 340nm as an equimolar amount of NADH produced by a coupled reaction.</p>
<b>Storage:</b>	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>Caution:</b>	The donors of the source materials have tested negative for HIV1, HIV2, HCV antibodies and HBsAg, HIV-1 Antigen and Syphilis. No test guarantees a product to be non-infectious. Therefore, all material derived from human fluids or tissues should be considered as potentially infectious.