

Native Human Amylase, Alpha 1A (salivary)

Cat. No. AMY1A-5329H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Native human AMY1A was expressed in Human Saliva.
Species	Human
Source	Human Saliva
Description	AMY1A is a digestive enzyme classified as a saccharidase (an enzyme that cleaves polysaccharides). The human AMY1A, completely unable to function in the absence of calcium. By acting at random locations along the starch chain, human AMY1A breaks down long-chain carbohydrates, ultimately yielding maltotriose and maltose from amylose, or maltose, glucose and "limit dextrin" from amylopectin. Because human salivary amylase can act anywhere on the substrate, human AMY1A tends to be faster acting than beta amylase enzyme.
Form	Lyophilized from a buffer containing 20 mM Tris+150 mM Sodium Chloride.
Purity	> 90% as determined by SDS-PAGE
Biological Activity	Typically > 100u/mg at 37°C. Human Salivary alpha Amylase enzyme Unit Definition: 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 340 nm as an equimolar amount of NADH produced by a coupled reaction.
Molecular Weight	55.86 kDa

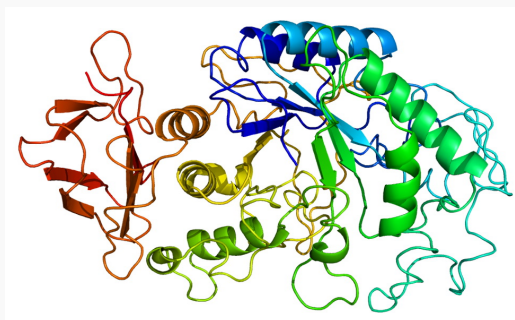
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Storage	Lyophilized powder is stable for 1 year at -20°C. Avoid repeated freeze-thaw cycles.
Pathways	Carbohydrate digestion and absorption; Digestion of dietary carbohydrate; Metabolic pathways; Metabolism of carbohydrates; Salivary secretion; Starch and sucrose metabolism
GENE INFORMATION	
Gene Name	AMY1A amylase, alpha 1A(salivary) [Homo sapiens]
Official Symbol	AMY1A
Synonyms	AMY1A; amylase, alpha 1A(salivary); AMY1; AMY1B; AMY1C; alpha-amylase 1; glycogenase; OTTHUMP00000012688; salivary alpha-amylase; salivary amylase alpha 1A; amylase, salivary, alpha-1A; 1,4-alpha-D-glucan glucanohydrolase 1; amylase, alpha 1A; salivary; EC 3.2.1.1
Gene ID	276
mRNA Refseq	NM_001008221
Protein Refseq	NP_001008222
MIM	104700
UniProt ID	P04745
Chromosome Location	1p21

PDBrendering based
on 1b2y.



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