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AMY1A Antibody (monoclonal) (M04)

Mouse monoclonal antibody raised against a partial recombinant AMY1A.
Catalog # AT1135a

Product Information

Application	WB, IHC
Primary Accession	P04745
Other Accession	NM_001008221
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2D4

Additional Information

Other Names	Alpha-amylase 1, 4-alpha-D-glucan glucanohydrolase 1, Salivary alpha-amylase, AMY1A, AMY1
Target/Specificity	AMY1A (NP_001008222, 172 a.a. ~ 245 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	AMY1A Antibody (monoclonal) (M04) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

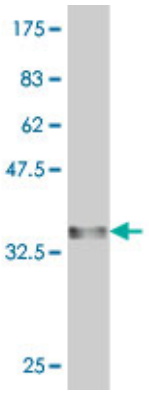
Amylases are secreted proteins that hydrolyze 1,4-alpha-glucoside bonds in oligosaccharides and polysaccharides, and thus catalyze the first step in digestion of dietary starch and glycogen. The human genome has a cluster of several amylase genes that are expressed at high levels in either salivary gland or pancreas. This gene encodes an amylase isoenzyme produced by the salivary gland. Alternative splicing results in multiple transcript variants encoding the same protein.

References

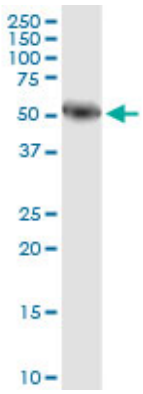
Probing the role of aromatic residues at the secondary saccharide-binding sites of human salivary alpha-amylase in substrate hydrolysis and bacterial binding. Ragunath C, et al. J Mol Biol, 2008 Dec 31. PMID 18951906.Social evaluation-induced amylase elevation and economic decision-making in the dictator game in humans. Takahashi T, et al. Neuro Endocrinol Lett, 2007 Oct. PMID 17984929.Diet and the evolution of human amylase gene copy number variation. Perry GH, et al. Nat Genet, 2007 Oct. PMID

17828263.Interaction of salivary alpha-amylase and amylase-binding-protein A (AbpA) of Streptococcus gordonii with glucosyltransferase of S. gordonii and Streptococcus mutans. Chaudhuri B, et al. BMC Microbiol, 2007 Jun 25. PMID 17593303.Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.

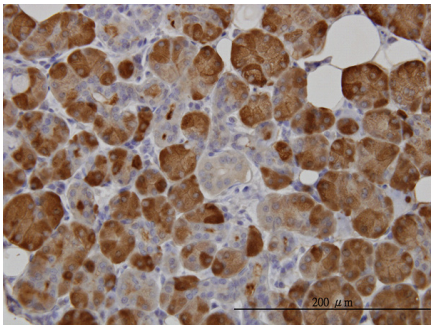
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (33.88 KDa) .



AMY1A monoclonal antibody (M04), clone 2D4. Western Blot analysis of AMY1A expression in human pancreas.



Immunoperoxidase of monoclonal antibody to AMY1A on formalin-fixed paraffin-embedded human salivary gland. [antibody concentration 3 ug/ml]

Citations

- Identification and detection of protein markers to differentiate between forensically relevant body fluids.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.