

Anti-Alpha Amylase 1 Picoband Antibody

Catalog # ABO10349

Product Information

Application	WB, IHC-P
Primary Accession	P04745
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Alpha-amylase 1(AMY1A AMY1B AMY1C) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Other Names	Alpha-amylase 1, 3.2.1.1, 1, 4-alpha-D-glucan glucanohydrolase 1, Salivary alpha-amylase, AMY1A, AMY1
Calculated MW	57768 Da
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/ml, Mouse, Rat, Human
Subcellular Localization	Secreted.
Protein Name	Alpha-amylase 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Alpha Amylase 1 (20-50aa NTQQGRTSIVHLFEWRWVDIALECERYLPK), different from the related mouse sequence by five amino acids, and from the related rat sequence by six amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also be aliquotted and stored frozen at -20° C for a longer time.Avoid repeated freezing and thawing.

Protein Information

Background

Amylase is an enzyme that catalyses the breakdown of starch into sugars. Amylase is present in human saliva, where it begins the chemical process of digestion. By in situ hybridization combined with high resolution cytogenetics, the amylase gene is mapped to 1p21. Amylase enzymes find use in bread making and to break down complex sugars such as starch (found in flour) into simple sugars. Yeast then feeds on these simple sugars and converts it into the waste products of alcohol and CO₂.

Images

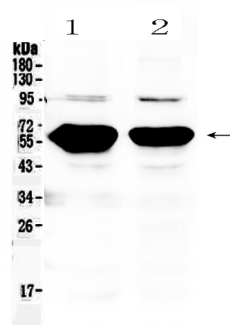


Figure 1. Western blot analysis of Alpha Amylase 1 using anti- Alpha Amylase 1 antibody (ABO10349).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.

The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat pancreas tissue lysates, Lane 2: mouse pancreas tissue lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes.

Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- Alpha Amylase 1 antigen affinity purified polyclonal antibody (Catalog # ABO10349) at 0.5 µg/mL overnight at 4 °C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Alpha Amylase 1 at approximately 58KD. The expected band size for Alpha Amylase 1 is at 58KD.

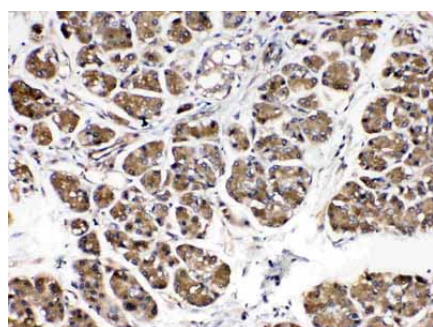


Figure 2. IHC analysis of Alpha Amylase 1 using anti- Alpha Amylase 1 antibody (ABO10349).Alpha Amylase 1 was detected in paraffin-embedded section of human pancreatic cancer tissues.

Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml rabbit anti- Alpha Amylase 1 Antibody (ABO10349) overnight at 4 °C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 °C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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