

Mouse Alpha A Crystallin Monoclonal Antibody | anti-CRYAA antibody

Anti-Alpha A Crystallin Antibody Picoband (monoclonal, 10B9)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126900	Mouse	Human, Mouse, Rat	Immunofluorescence, Immunocytochemistry, Western Blot

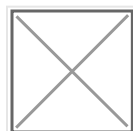
PRODUCT SYNONYMS

Alpha A Crystallin; Monoclonal Antibody; Anti-Alpha A Crystallin Antibody Picoband (monoclonal; 10B9); anti-CRYAA antibody

PRODUCT SPECIFICATIONS

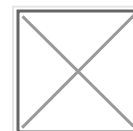
Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Number	10B9
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-CRYAA antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E coli-derived human Alpha A Crystallin recombinant protein (Position: M1-S173). Human Alpha A Crystallin shares 94.8% amino acid (aa) sequence identity with both mouse and rat Alpha A Crystallin.
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

IMAGES



IF (Immunofluorescence)

Figure 2. IF analysis of Alpha A Crystallin using anti-Alpha A Crystallin antibody (AAA126900). Alpha A Crystallin was detected in an immunocytochemical section of HepG2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL mouse anti-Alpha A Crystallin Antibody (AAA126900) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Mouse IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of Alpha A Crystallin using anti-Alpha A Crystallin antibody (AAA126900). 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 30 ug of sample under reducing conditions. Lane 1: rat eye tissue lysates, Lane 2: mouse eye tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Alpha A Crystallin antigen affinity purified monoclonal antibody (#AAA126900) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-mouse 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 A Crystallin at approximately 20-23 kDa. The expected band size for Alpha A Crystallin is at 20-23 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-CRYAA antibody	Alpha-crystallin A chain is a protein that in humans is encoded by the CRYAA gene. Mammalian lens crystallins are divided into alpha, beta, and gamma families. Alpha crystallins are composed of two gene products: alpha-A and alpha-B, for acidic and basic, respectively. Alpha crystallins can be induced by heat shock and are members of the small heat shock protein (HSP20) family. They act as molecular chaperones although they do not renature proteins and release them in the fashion of a true chaperone; instead they hold them in large soluble aggregates. Two additional functions of alpha crystallins are an autokinase activity and participation in the intracellular architecture. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Alpha-A and alpha-B gene products are differentially expressed; alpha-A is preferentially restricted to the lens and alpha-B is expressed widely in many tissues and organs. Defects in this gene cause autosomal dominant congenital cataract (ADCC).
Product Categories/Family for anti-CRYAA antibody	Primary Antibodies, Mouse Monoclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503055
NCBI GeneID	1409
NCBI Accession #	NP_000385.1
NCBI GenBank Nucleotide #	NM_000394.3
UniProt Accession #	P02489; Q53X53; AAB33370
Molecular Weight	19,909 Da
NCBI Official Full Name	alpha-crystallin A chain
NCBI Official Synonym Full Names	crystallin, alpha A
NCBI Official Symbol	CRYAA
NCBI Official Synonym Symbols	CRYA1; HSPB4; CTRCT9
NCBI Protein Information	alpha-crystallin A chain; crystallin, alpha-1; heat shock protein beta-4; human alphaA-crystallin (CRYA1)
UniProt Protein Name	Alpha-crystallin A chain
UniProt Gene Name	CRYAA
UniProt Synonym Gene Names	CRYA1; HSPB4; HspB4
UniProt Entry Name	CRYAA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/alpha-a-crystallin-antibody-clone-10b9-immunofluorescence-immunocytochemistry-western-blot-elisa/126900>