Datasheet for ABIN4886549

anti-CRYAA antibody (AA 1-173)

3 Images

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Overview

Quantity:	100 µg
Target:	CRYAA
Binding Specificity:	AA 1-173
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CRYAA antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Flow Cytometry (FACS), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Purpose:	Anti-Alpha A Crystallin/CRYAA Antibody Picoband®
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.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-Alpha A Crystallin/CRYAA Antibody Picoband® (ABIN4886549). Tested in Flow Cytometry, IHC, IHC-F, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-

Product Details

	performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	CRYAA
Alternative Name:	CRYAA (CRYAA Products)
Background:	Synonyms: Alpha-crystallin A chain,Heat shock protein beta-4,HspB4,Alpha-crystallin A (1-172),Alpha-crystallin A (1-168),Alpha-crystallin A (1-162),CRYAA,CRYA1, HSPB4, Tissue Specificity: Expressed in eye lens. . Background: 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).
Molecular Weight:	20 kDa
Gene ID:	1409
UniProt:	P02489
Pathways:	M Phase

Application Details

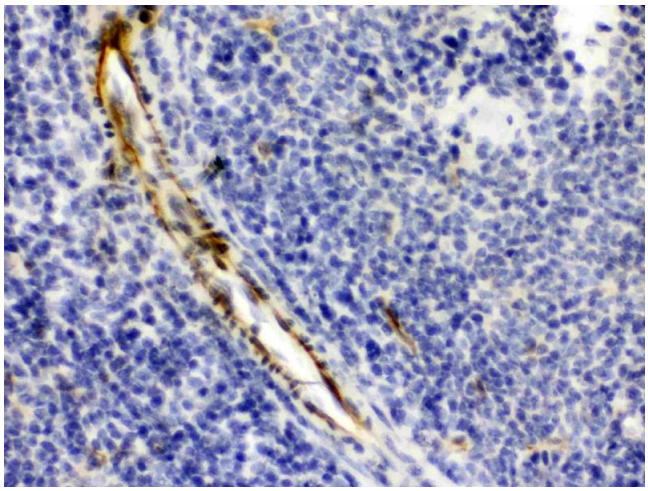
Application Notes:	Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL, Mouse, Rat, Human Immunohistochemistry (Frozen Section), 0.5-1 µg/mL, Human Immunocytochemistry, 0.5-1 µg/mL, Human Flow Cytometry (Fixed), 1-3 µg/1x10^6 cells, Human

Application Details

	1. "Entrez Gene: CRYAA crystallin, alpha A". 2. Derham BK, Harding JJ (1999). "Alpha-crystallin as a molecular chaperone.". Progress in retinal and eye research 18 (4): 463-509. 3. Jaworski CJ, Piatigorsky J (1989). "A pseudo-exon in the functional human alpha A-crystallin gene.". Nature337 (6209): 752-4.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

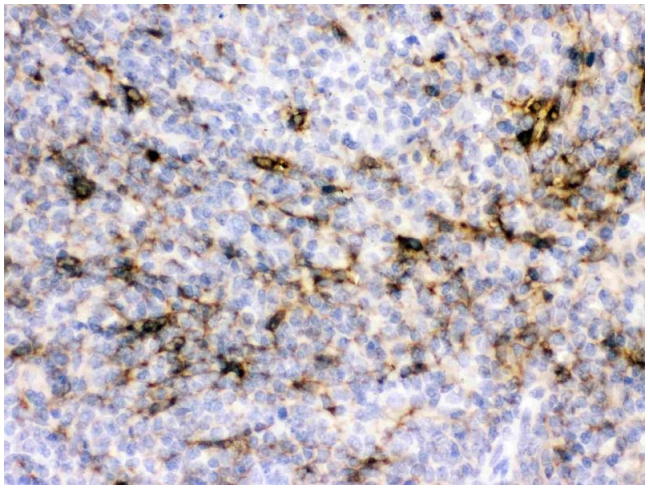
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.



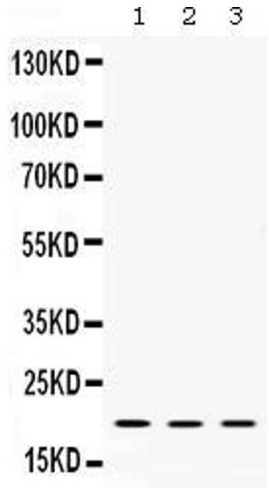
Immunohistochemistry

Image 1. Alpha A Crystallin was detected in paraffin-embedded sections of mouse spleen tissues using rabbit anti- Alpha A Crystallin Antigen Affinity purified polyclonal antibody (Catalog #) at 1 µg/mL. The immunohistochemical section was developed using SABC method (Catalog # SA1022).



Immunohistochemistry

Image 2. Alpha A Crystallin was detected in paraffin-embedded sections of rat spleen tissues using rabbit anti- Alpha A Crystallin Antigen Affinity purified polyclonal antibody (Catalog #) at 1 ??g/mL. The immunohistochemical section was developed using SABC method (Catalog # SA1022).



Western Blotting

Image 3. Western blot analysis of Alpha A Crystallin expression in rat spleen extract (Lane 1), mouse eye ball extract (Lane 2) and SMMC7721 whole cell lysates (Lane 3). Alpha A Crystallin at 20KD was detected using rabbit anti- Alpha A Crystallin Antigen Affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1002).