

Datasheet for ABIN7599030
anti-CRYAA antibody (AA 1-173)



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Overview

Quantity:	100 µg
Target:	CRYAA
Binding Specificity:	AA 1-173
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CRYAA antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-Alpha A Crystallin Antibody Picoband® (monoclonal, 10B9)
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.
Clone:	10B9
Isotype:	IgG1
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-Alpha A Crystallin Antibody Picoband® (monoclonal, 10B9) (ABIN7599030). Tested in IF, 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-performing

Product Details

antibodies are designated as Picoband, ensuring unmatched performance.

Purification: Immunogen affinity purified.

Target Details

Target: CRYAA

Alternative Name: CRYAA ([CRYAA Products](#))

Background: Synonyms: Ras-related protein Rab-5A, RAB5A, RAB5
Tissue Specificity: Widely expressed in fetal and adult tissues.
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: 20-23 kDa

Gene ID: 1409

UniProt: [P02489](#)

Pathways: [M Phase](#)

Application Details

Application Notes: Western blot, 0.25-0.5 µg/mL, Mouse, Rat
Immunocytochemistry/Immunofluorescence, 5 µg/mL, Human
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.

Application Details

Restrictions: For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	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 freezing and thawing.