

Crystallin-αB rabbit pAb

Cat No.:ES2057

For research use only

Overview

Product Name Crystallin-αB rabbit pAb

Host species Rabbit

Applications WB;IHC;IF;ELISA **Species Cross-Reactivity** Human;Mouse;Rat

Recommended dilutions Western Blot: 1/500 - 1/2000.

Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.

Immunogen The antiserum was produced against synthesized

peptide derived from human CRYAB. AA range:10-59

Specificity Crystallin-αB Polyclonal Antibody detects

endogenous levels of Crystallin-αB protein.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and

0.02% sodium azide.

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name Alpha-crystallin B chain

Gene Name CRYAB

Cellular localization Cytoplasm . Nucleus . Secreted . Lysosome .

Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35

speckles or nuclear splicing speckles

(PubMed:19464326). Localizes at the Z-bands and

the intercalated disk in cardiomyocytes

(PubMed:28493373). Can be secreted; the secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum-Golgi intermediate compartment) followed by vesicle entry and

secretion (PubMed:32272059). .

Purification The antibody was affinity-purified from rabbit

antiserum by affinity-chromatography using

epitope-specific immunogen.

Clonality Polyclonal



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Concentration
Observed band
Human Gene ID
Human Swiss-Prot Number

24kD 1410 P02511

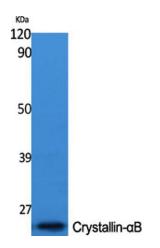
1 mg/ml

Alternative Names

CRYAB; CRYA2; Alpha-crystallin B chain; Alpha(B)-crystallin; Heat shock protein beta-5; HspB5; Renal carcinoma antigen NY-REN-27; Rosenthal fiber component

Background

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. Post-translational modifications decrease the ability to chaperone. These heterogeneous aggregates consist of 30-40 subunits; the alpha-A and alpha-B subunits have a 3:1 ratio, respectively. 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 distin



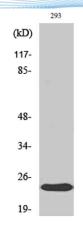
Western Blot analysis of various cells using Crystallin- $\!\alpha B$ Polyclonal Antibody



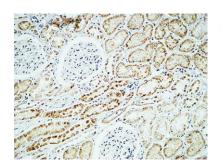
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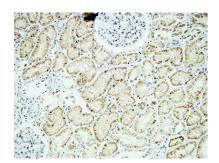




Western Blot analysis of 293 cells using Crystallin- αB Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:400(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min



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