

Anti-Alpha-crystallin B Antibody

Rabbit polyclonal antibody to Alpha-crystallin B Catalog # AP61187

Specification

Anti-Alpha-crystallin B Antibody - Product Information

Application WB, IHC
Primary Accession P02511
Other Accession P23927

Reactivity Human, Mouse, Rat, Monkey

Host Rabbit
Clonality Polyclonal
Calculated MW 20159

Anti-Alpha-crystallin B Antibody - Additional Information

Gene ID 1410

Other Names

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

Target/Specificity

Recognizes endogenous levels of Alpha-crystallin B protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200) IHC~~1:100~500

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-Alpha-crystallin B Antibody - Protein Information

Name CRYAB (HGNC:2389)

Synonyms CRYA2, HSPB5

Function

May contribute to the transparency and refractive index of the lens. Has chaperone-like activity, preventing aggregation of various proteins under a wide range of stress conditions. In lens epithelial cells, stabilizes the ATP6V1A protein, preventing its degradation by the proteasome (By similarity).



Cellular Location

Cytoplasm. Nucleus Secreted. Lysosome {ECO:0000250|UniProtKB:P23927}. Note=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).

Tissue Location

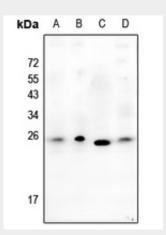
Lens as well as other tissues (PubMed:2387586, PubMed:838078). Expressed in myocardial tissue (PubMed:28493373)

Anti-Alpha-crystallin B Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

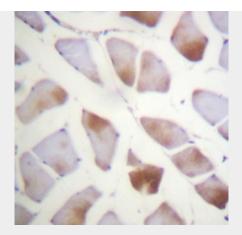
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Alpha-crystallin B Antibody - Images



Western blot analysis of Alpha-crystallin B expression in A549 (A), HEK293T (B), PMVEC (C), BV2 (D) whole cell lysates.





Immunohistochemical analysis of Alpha-crystallin B staining in human skeletal muscle formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-Alpha-crystallin B Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Alpha-crystallin B. The exact sequence is proprietary.