

KD-Validated Anti-Crystallin alpha B Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1056

Specification

KD-Validated Anti-Crystallin alpha B Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC
Primary Accession P02511
Reactivity Rat

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 20 kDa, observed, 18 kDa KDa

Gene Name CRYAB

Aliases CRYAB; Crystallin Alpha B; HSPB5; CRYA2;

Renal Carcinoma Antigen NY-REN-27; Heat Shock Protein Beta-5; Rosenthal Fiber Component; Alpha-Crystallin B Chain; Epididymis Secretory Protein Li 101; Heat-Shock 20 KD Like-Protein; Crystallin, Alpha B; Alpha(B)-Crystallin; HEL-S-101; CTRCT16; CMD1II; CTPP2; HspB5; MFM2

Immunogen A synthesized peptide derived from human

CRYAB

KD-Validated Anti-Crystallin alpha B Rabbit Monoclonal Antibody - Additional Information

Gene ID **1410**

Other Names

Alpha-crystallin B chain, Alpha(B)-crystallin, Heat shock protein beta-5, HspB5, Heat shock protein family B member 5, Renal carcinoma antigen NY-REN-27, Rosenthal fiber component, CRYAB (HGNC:2389), CRYA2, HSPB5

KD-Validated Anti-Crystallin alpha B Rabbit Monoclonal 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

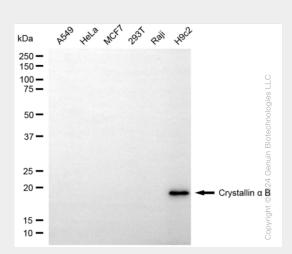
Lens as well as other tissues (PubMed:2387586, PubMed:838078). Expressed in myocardial tissue (PubMed:28493373)

KD-Validated Anti-Crystallin alpha B Rabbit Monoclonal Antibody - Protocols

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

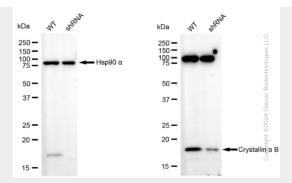
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Crystallin alpha B Rabbit Monoclonal Antibody - Images

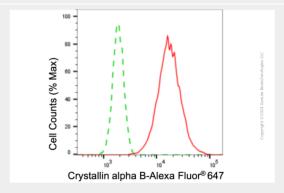


Western blotting analysis using anti-crystallin alpha B antibody (Cat#AGI1056). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-crystallin alpha B antibody (Cat#AGI1056, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

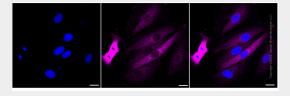




Western blotting analysis using anti-crystallin α B antibody (Cat#AGI1056). Crystallin α B expression in wild type (WT) and crystallin α B (CRYAB) shRNA knockdown (KD) H9c2 cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-crystallin α B antibody (Cat#AGI1056, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Crystallin alpha B expression in H9c2 cells using crystallin alpha B antibody (Cat#AGI1056, 1:2,000). Green, isotype control; red, crystallin alpha B.



Immunocytochemical staining of HT-1080 cells with crystallin alpha B antibody (Cat#AGI1056, 1:1,000). Nuclei were stained blue with DAPI; Crystallin alpha B was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μm .