

CRYAB Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8424b

Specification

CRYAB Antibody - Product Information

Application WB,E
Primary Accession P02511

Reactivity Human, Mouse, Rat

Host Mouse
Clonality Monoclonal
Isotype IgG1, K
Calculated MW 20159

CRYAB Antibody - Additional Information

Gene ID 1410

Other Names

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

Target/Specificity

This CRYAB antibody is generated from a mouse immunized with a recombination protein from the human region of human CRYAB.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CRYAB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CRYAB 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

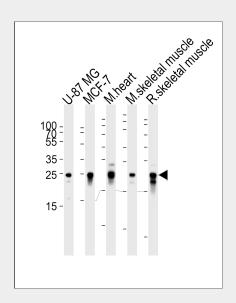
Lens as well as other tissues (PubMed:2387586, PubMed:838078). Expressed in myocardial tissue (PubMed:28493373)

CRYAB Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CRYAB Antibody - Images



Western blot analysis of lysates from U-87 MG, MCF-7 cell line, mouse heart and skeletal muscle, rat skeletal muscle tisue lysates (from left to right), using CRYAB Antibody(Cat. #AM8424b). AM8424b was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at 35µg per lane.



CRYAB Antibody - Background

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.

CRYAB Antibody - References

Kramps J.A., et al. FEBS Lett. 74:82-84(1977).

Dubin R.A., et al. Genomics 7:594-601(1990).

Iwaki A., et al. Neurosci. Lett. 140:89-92(1992).

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Ota T., et al. Nat. Genet. 36:40-45(2004).