

CRYAB Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8424b

Product Information

Application WB, E **Primary Accession** P02511

Reactivity Human, Rat, Mouse

HostMouseClonalityMonoclonalIsotypeIgG1,κ

Clone Names 1329CT523.140.120

Calculated MW 20159

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.

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)

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.

References

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

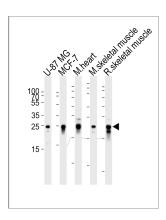
Dubin R.A., et al. Genomics 7:594-601(1990).

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

Yu W., et al. Submitted (JUN-1997) to the EMBL/GenBank/DDBJ databases.

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

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.