10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CRYAB Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8424b

Product Information

Application	WB, E
Primary Accession	P02511
Reactivity	Human, Rat, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,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

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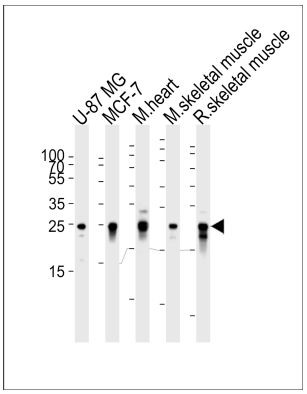
Dubin R.A.,et al.Genomics 7:594-601(1990).
Iwaki A.,et al.Neurosci. Lett. 140:89-92(1992).
Yu W.,et al.Submitted (JUN-1997) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).

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.