

CRYAB / Alpha B Crystallin Antibody

Mouse Monoclonal Antibody Catalog # ALS12840

Specification

CRYAB / Alpha B Crystallin Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC <u>P02511</u> Human Mouse Monoclonal 20kDa KDa

CRYAB / Alpha B Crystallin 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 Purified full length recombinant CRYAB-Trx(aa1-175) is expressed in E. coli strain BL21 (DE3).

Reconstitution & Storage +4°C or -20°C, Avoid repeated freezing and thawing.

Precautions CRYAB / Alpha B Crystallin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CRYAB / Alpha B Crystallin 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:838078, PubMed:2387586). Expressed in myocardial tissue (PubMed:28493373)

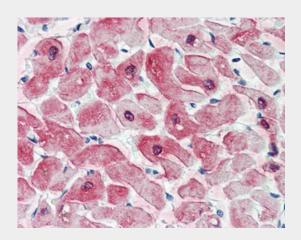
Volume 50 μl

CRYAB / Alpha B Crystallin Antibody - Protocols

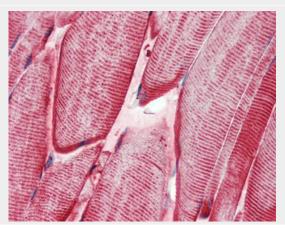
Provided below are standard protocols that you may find useful for product applications.

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

CRYAB / Alpha B Crystallin Antibody - Images



Anti-CRYAB / Alpha B Crystallin antibody IHC of human heart.





Anti-CRYAB / Alpha B Crystallin antibody IHC of human skeletal muscle.

CRYAB / Alpha B Crystallin 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 / Alpha B Crystallin 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). Yu W., et al. Submitted (JUN-1997) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004).