

# **CRYAB / Alpha B Crystallin Antibody**

Mouse Monoclonal Antibody Catalog # ALS12840

### **Specification**

### **CRYAB / Alpha B Crystallin Antibody - Product Information**

Application IHC
Primary Accession P02511
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 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)

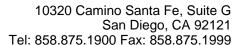
Synonyms CRYA2, HSPB5

#### **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)

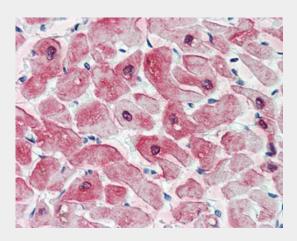
**Volume** 50 μl

## CRYAB / Alpha B Crystallin Antibody - Protocols

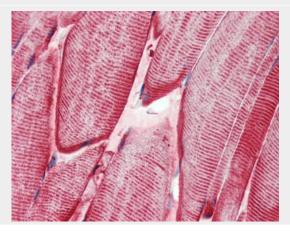
Provided below are standard protocols that you may find useful for product applications.

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

## **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).