

### CRYAB / Alpha B Crystallin Antibody (clone 6D11)

Mouse Monoclonal Antibody Catalog # ALS16121

## **Specification**

## CRYAB / Alpha B Crystallin Antibody (clone 6D11) - Product Information

Application WB, IHC-P, IF, IP, FC

Primary Accession <u>P02511</u>

Reactivity
Host
Clonality
Human, Rat, Monkey
Mouse
Monoclonal

Calculated MW

Dilution

20kDa KDa

WB~~1:1000

IHC-P~~N/A

IF~~1:50~200

IP~~N/A FC~~1:10~50

# CRYAB / Alpha B Crystallin Antibody (clone 6D11) - 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

Human CRYAB / Alpha B Crystallin

## **Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

### **Precautions**

CRYAB / Alpha B Crystallin Antibody (clone 6D11) is for research use only and not for use in diagnostic or therapeutic procedures.

# CRYAB / Alpha B Crystallin Antibody (clone 6D11) - 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**

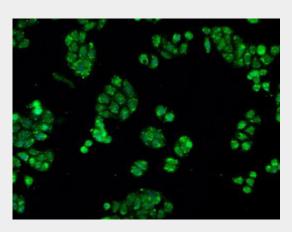
Lens as well as other tissues (PubMed:2387586, PubMed:838078). Expressed in myocardial tissue (PubMed:28493373)

## CRYAB / Alpha B Crystallin Antibody (clone 6D11) - Protocols

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

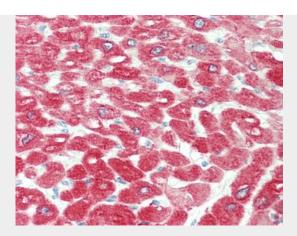
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## CRYAB / Alpha B Crystallin Antibody (clone 6D11) - Images

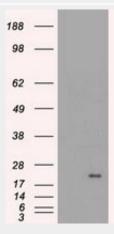


Immunofluorescent staining of HT29 cells using anti-CRYAB mouse monoclonal antibody.

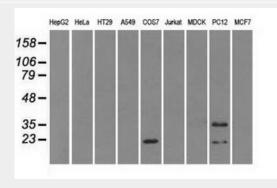




Anti-CRYAB / Alpha B Crystallin antibody IHC staining of human heart.

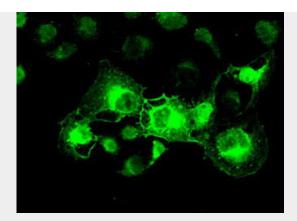


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CRYAB...



Western blot of extracts (35 ug) from 9 different cell lines by using anti-CRYAB monoclonal...





Anti-CRYAB mouse monoclonal antibody immunofluorescent staining of COS7 cells transiently...

## CRYAB / Alpha B Crystallin Antibody (clone 6D11) - 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 (clone 6D11) - 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).