

### CRYAB / Alpha B Crystallin Antibody (clone 6D11) Mouse Monoclonal Antibody Catalog # ALS16121

### Specification

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

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

### 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).

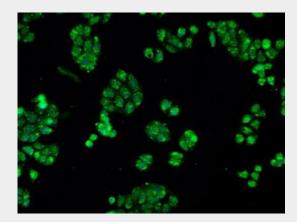
**Tissue Location** Lens as well as other tissues (PubMed:2387586, PubMed:838078). Expressed in myocardial tissue (PubMed:28493373)

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

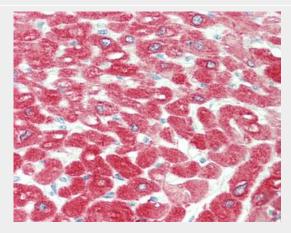
Provided below are standard protocols that you may find useful for product applications.

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

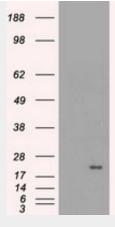
# CRYAB / Alpha B Crystallin Antibody (clone 6D11) - Images



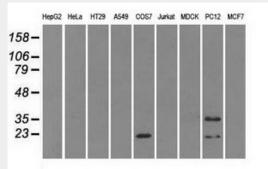
Immunofluorescent staining of HT29 cells using anti-CRYAB mouse monoclonal antibody.



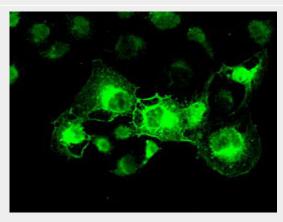
Anti-CRYAB / Alpha B Crystallin antibody IHC staining of human heart.



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).

