

# Anti-CRYAB/Alpha B Crystallin Rabbit Monoclonal Antibody

Catalog # ABO13807

## Anti-CRYAB/Alpha B Crystallin Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format **Description** Anti-CRYAB/Alpha B Cry WB, IHC, IF, ICC, IP <u>P02511</u> Rabbit Rabbit IgG Rat, Human Monoclonal Liquid

Anti-CRYAB/Alpha B Crystallin Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Rat.

## Anti-CRYAB/Alpha B Crystallin Rabbit Monoclonal Antibody - Additional Information

Gene ID 1410

**Other Names** 

Alpha-crystallin B chain, Alpha(B)-crystallin, Heat shock protein beta-5, HspB5, Heat shock protein family B member 5, Renal carcinoma antigen NY-REN-27, Rosenthal fiber component, CRYAB (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=2389" target="\_blank">HGNC:2389</a>), CRYA2, HSPB5

Calculated MW 20159 MW KDa

Application Details WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:80

Subcellular Localization

Cytoplasm. Nucleus. Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles.

**Tissue Specificity** Lens as well as other tissues.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human CRYAB

Purification Affinity-chromatography



Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

### Anti-CRYAB/Alpha B Crystallin Rabbit Monoclonal Antibody - Protein Information

Name CRYAB (<u>HGNC:2389</u>)

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** 

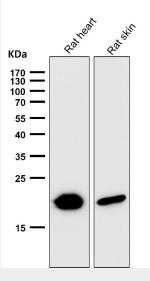
Lens as well as other tissues (PubMed:2387586, PubMed:838078). Expressed in myocardial tissue (PubMed:28493373)

#### Anti-CRYAB/Alpha B Crystallin Rabbit Monoclonal Antibody - Protocols

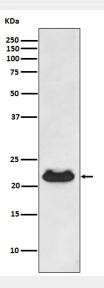
Provided below are standard protocols that you may find useful for product applications.

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

#### Anti-CRYAB/Alpha B Crystallin Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.



Western blot analysis of CRYAB expression in human fetal heart lysate.