

**CRYAB / Alpha B Crystallin Antibody (clone 1A7.D5)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS14977****Specification**

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**CRYAB / Alpha B Crystallin Antibody (clone 1A7.D5) - Product Information**

|                   |                                    |
|-------------------|------------------------------------|
| Application       | WB, IHC-P, E                       |
| Primary Accession | <a href="#">P02511</a>             |
| Reactivity        | Human, Bovine                      |
| Host              | Mouse                              |
| Clonality         | Monoclonal                         |
| Calculated MW     | 20kDa KDa                          |
| Dilution          | WB~~1:1000<br>IHC-P~~N/A<br>E~~N/A |

**CRYAB / Alpha B Crystallin Antibody (clone 1A7.D5) - 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**

Detects a band at ~20kD (Predicted mol. weight is ~21 kD) corresponding to alpha B crystallin. Does not cross react with alpha A crystallin, beta-L crystallin, Beta-H crystallin, gamma crystallin, Hsp25, Hsp27 or Hsp47 proteins.

**Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

**Precautions**

CRYAB / Alpha B Crystallin Antibody (clone 1A7.D5) is for research use only and not for use in diagnostic or therapeutic procedures.

**CRYAB / Alpha B Crystallin Antibody (clone 1A7.D5) - 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).

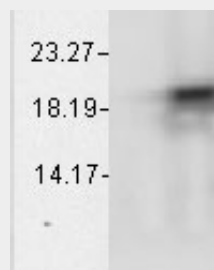
**Tissue Location**

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

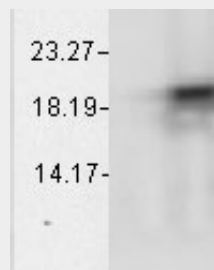
**CRYAB / Alpha B Crystallin Antibody (clone 1A7.D5) - Protocols**

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

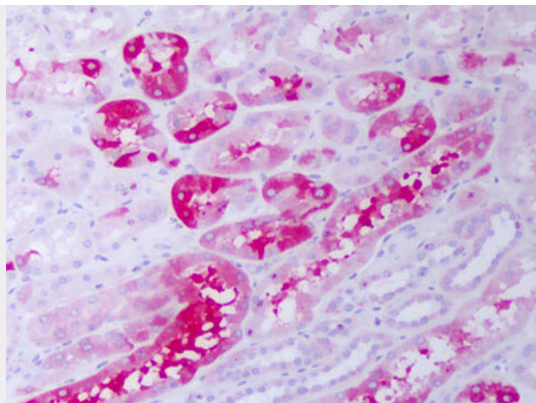
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**CRYAB / Alpha B Crystallin Antibody (clone 1A7.D5) - Images**

Western blot analysis of AlphaB Crystallin in bovine cell lines using a 1:1000 dilution of CRYAB...



Alpha B Crystallin (1A7. D5); AlphaA (L); AlphaB (R).



Anti-CRYAB / Alpha B Crystallin antibody IHC of human kidney, tubules.

#### **CRYAB / Alpha B Crystallin Antibody (clone 1A7.D5) - 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 1A7.D5) - 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).