

CRYAB / Alpha B Crystallin Antibody (clone 3A10.H4)
Mouse Monoclonal Antibody
Catalog # ALS14981**Specification**

CRYAB / Alpha B Crystallin Antibody (clone 3A10.H4) - Product Information

Application	IHC
Primary Accession	P02511
Reactivity	Human, Bovine
Host	Mouse
Clonality	Monoclonal
Calculated MW	20kDa KDa

CRYAB / Alpha B Crystallin Antibody (clone 3A10.H4) - 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 3A10.H4) is for research use only and not for use in diagnostic or therapeutic procedures.

CRYAB / Alpha B Crystallin Antibody (clone 3A10.H4) - 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

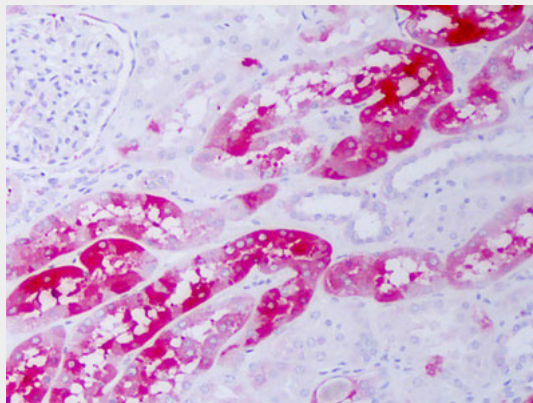
Lens as well as other tissues (PubMed:838078, PubMed:2387586). Expressed in myocardial tissue (PubMed:28493373)

CRYAB / Alpha B Crystallin Antibody (clone 3A10.H4) - 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 3A10.H4) - Images



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

CRYAB / Alpha B Crystallin Antibody (clone 3A10.H4) - 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 3A10.H4) - 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).