

## CRYAB monoclonal antibody, clone 3A10.C9

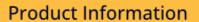
Catalog # MAB2180 Size 100 ug

| Specification           |  |
|-------------------------|--|
| Product Description     | Mouse monoclonal antibody raised against native CRYAB.   |
| Immunogen               | Native purified CRYAB.   |
| Host                    | Mouse  |
| Reactivity              | Bovine, Human  |
| Specificity             | It does not cross-react with alpha A crystallin, beta-L crystallin, beta-H crystallin, gamma crystallin, Hs p25, Hsp27, or Hsp47 proteins. |
| Form                    | Liquid   |
| Isotype                 | lgG1   |
| Quality Control Testing | Antibody Reactive Against Native Purified Protein.   |
| Recommend Usage         | ELISA (1 ug/mL) Western Blot (0.5-1 ug/mL) The optimal working dilution should be determined by the end user.                              |
| Storage Buffer          | In PBS, pH 7.4   |
| Storage Instruction     | Store at -20°C. Aliquot to avoid repeated freezing and thawing.  |

## **Applications**

- Western Blot
- Enzyme-linked Immunoabsorbent Assay

## Gene Info — CRYAB





| Entrez GenelD      | <u>1410</u>  |
|--------------------|--|
| Gene Name          | CRYAB  |
| Gene Alias         | CRYA2, CTPP2, HSPB5  |
| Gene Description   | crystallin, alpha B  |
| Omim ID            | <u>123590</u> <u>608810</u>  |
| Gene Ontology      | <u>Hyperlink</u>   |
| Gene Summary       | Crystallins are separated into two classes: taxon-specific, or enzyme, and ubiquitous. The latter cl ass constitutes the major proteins of vertebrate eye lens and maintains the transparency and refra ctive index of the lens. Since lens central fiber cells lose their nuclei during development, these cry stallins are made and then retained throughout life, making them extremely stable proteins. Mam malian lens crystallins are divided into alpha, beta, and gamma families; beta and gamma crystall ins are also considered as a superfamily. Alpha and beta families are further divided into acidic a nd basic groups. Seven protein regions exist in crystallins: four homologous motifs, a connecting peptide, and N- and C-terminal extensions. Alpha crystallins are composed of two gene products: alpha-A and alpha-B, for acidic and basic, respectively. Alpha crystallins can be induced by heat shock and are members of the small heat shock protein (sHSP also known as the HSP20) family. They act as molecular chaperones although they do not renature proteins and release them in the fashion of a true chaperone; instead they hold them in large soluble aggregates. Post-translational modifications decrease the ability to chaperone. These heterogeneous aggregates consist of 30-40 subunits; the alpha-A and alpha-B subunits have a 3:1 ratio, respectively. Two additional functions of alpha crystallins are an autokinase activity and participation in the intracellular architecture. Alpha-A and alpha-B gene products are differentially expressed; alpha-A is preferentially restricted to the lens and alpha-B is expressed widely in many tissues and organs. Elevated expression of alpha-B crystallin occurs in many neurological diseases; a missense mutation cosegregated in a family with a desmin-related myopathy. [provided by RefSeq |
| Other Designations | alpha crystallin B chain heat-shock 20 kD like-protein   |

## Disease

- Alzheimer disease
- Cognition
- Genetic Predisposition to Disease
- Multiple Sclerosis