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	IgG1
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 GeneID	1410
Gene Name	CRYAB
Gene Alias	CRYA2, CTPP2, HSPB5
Gene Description	crystallin, alpha B
Omim ID	123590 608810
Gene Ontology	Hyperlink
Gene Summary	Crystallins are separated into two classes: taxon-specific, or enzyme, and ubiquitous. The latter class constitutes the major proteins of vertebrate eye lens and maintains the transparency and refractive index of the lens. Since lens central fiber cells lose their nuclei during development, these crystallins are made and then retained throughout life, making them extremely stable proteins. Mammalian lens crystallins are divided into alpha, beta, and gamma families; beta and gamma crystallins are also considered as a superfamily. Alpha and beta families are further divided into acidic and 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