

# CRYAB monoclonal antibody, clone ABHC-3

Catalog # MAB19922 Size 100 uL

## Applications



#### Western Blot (Cell lysate)

Western blot analysis of human fetal heart lysate with CRYAB monoclonal antibody.

Specification	
Product Description	Rabbit monoclonal antibody raised against synthetic peptide of human CRYAB.
Immunogen	A synthetic peptide corresponding to human CRYAB.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Affinity purification
lsotype	lgG
Recommend Usage	Immunocytochemistry (1:50-1:200) Immunofluorescence (1:50-1:200) Immunohistochemistry (1:50-1:200) Immunoprecipitation (1:80) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

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#### **Product Information**

Storage Instruction

Store at -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and st ored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

### Applications

• Western Blot (Cell lysate)

Western blot analysis of human fetal heart lysate with CRYAB monoclonal antibody.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)
- Immunocytochemistry
- Immunofluorescence
- Immunoprecipitation

Gene Info — CRYAB	
Entrez GenelD	<u>1410</u>
Protein Accession#	<u>P02511</u>
Gene Name	CRYAB
Gene Alias	CRYA2, CTPP2, HSPB5
Gene Description	crystallin, alpha B
Omim ID	<u>123590 608810</u>
Gene Ontology	Hyperlink



**Gene Summary** 

#### **Product Information**

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 functi ons 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 restricte d 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 f amily with a desmin-related myopathy. [provided by RefSeq

#### **Other Designations**

alpha crystallin B chain|heat-shock 20 kD like-protein

#### Disease

- Alzheimer disease
- <u>Cognition</u>
- Genetic Predisposition to Disease
- Multiple Sclerosis