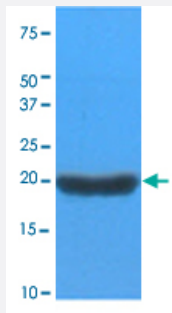


# CRYAA monoclonal antibody, clone c9F2

Catalog # MAB1054

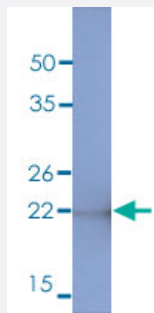
Size 100 uL

## Applications



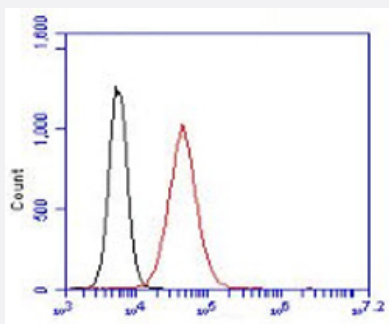
### Western Blot (Tissue lysate)

Western blot analysis of mouse eye tissue lysate.



### Western Blot (Cell lysate)

Western blot analysis of 293T cell lysate.



### Flow Cytometry

Flow cytometry analysis of Balb/3T3 cell line, staining at 2-5ug for 1x10<sup>6</sup>(red line) cells. The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).

## Specification

### Product Description

Mouse monoclonal antibody raised against partial recombinant CRYAA.

### Immunogen

Recombinant protein corresponding to amino acids 1-173 of human CRYAA.

Host	Mouse
Reactivity	Human, Rat
Form	Liquid
Purification	Protein G affinity chromatography
Isotype	IgG1, kappa
Recommend Usage	ELISA Flow Cytometry Western Blot (1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Western Blot (Tissue lysate)

Western blot analysis of mouse eye tissue lysate.

- Western Blot (Cell lysate)

Western blot analysis of 293T cell lysate.

- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

Flow cytometry analysis of Balb/3T3 cell line, staining at 2-5ug for 1x10<sup>6</sup>(red line) cells. The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).

## Gene Info — CRYAA

Entrez GeneID [1409](#)

GeneBank Accession# [NM\\_000394](#)

Protein Accession# [P02489](#)

Gene Name	CRYAA
Gene Alias	CRYA1, HSPB4
Gene Description	crystallin, alpha A
Omim ID	<a href="#">123580</a>
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	<p>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. Defects in this gene cause autosomal dominant congenital cataract (ADCC). [provided by RefSeq]</p>
Other Designations	crystallin, alpha-1 human alphaA-crystallin (CRYA1)

## Publication Reference

- [Small heat shock proteins from extremophiles: a review.](#)

Laksanalamai P, Robb FT.

Extremophiles 2004 Feb; 8(1):1.

Application: WB, Human, Vertebrate eyes

- [Characterization of alphaA-crystallin from high molecular weight aggregates in the normal human lens.](#)

Fujii N, Awakura M, Takemoto L, Inomata M, Takata T, Fujii N, Saito T.

Molecular Vision 2003 Jul; 9:315.

Application: SDS-PAGE, WB-Ti, Bovine, Human, Lenses

## Disease

- [Cataract](#)
- [Genetic Predisposition to Disease](#)