

## ARG59342 anti-alpha A Crystallin antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes alpha A Crystallin
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	alpha A Crystallin
Species	Human
Immunogen	Recombinant protein corresponding to M1-S173 of Human alpha A Crystallin.
Conjugation	Un-conjugated
Alternate Names	CRYA1; HSPB4; CTRCT9

### Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml
Application Note	IHC-P: Antigen Retrieval: By heat mediation. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

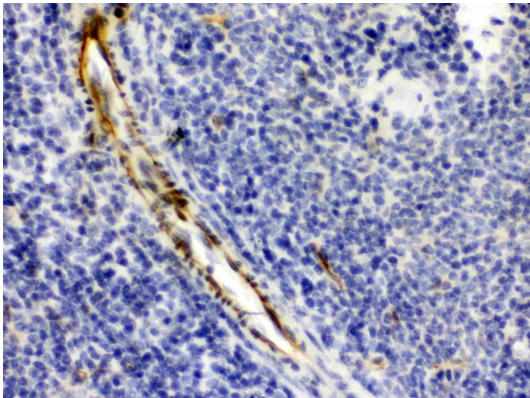
### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol	CRYAA
Gene Full Name	crystallin alpha A
Background	Mammalian lens crystallins are divided into alpha, beta, and gamma families. 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 (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. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. 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, Jan 2014]
Function	Contributes 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. [UniProt]
Calculated Mw	20 kDa
Cellular Localization	Cytoplasm. Nucleus. Note=Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles. [UniProt]

Images



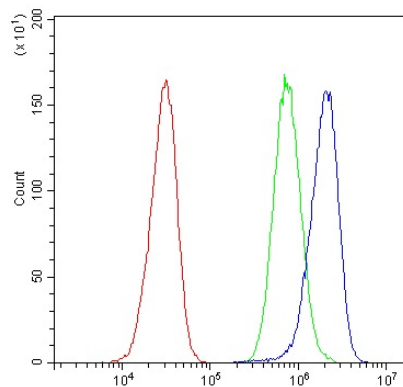
ARG59342 anti-alpha A Crystallin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse spleen stained with ARG59342 anti-alpha A Crystallin antibody at 1 µg/ml dilution.



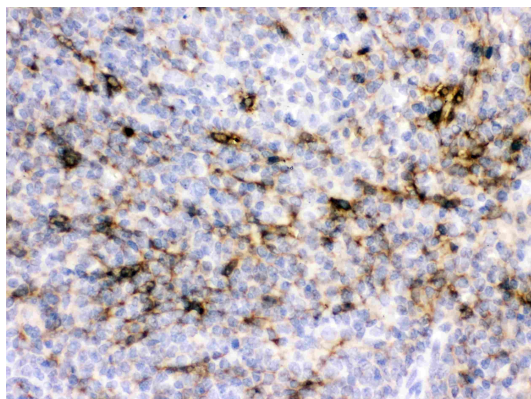
ARG59342 anti-alpha A Crystallin antibody WB image

Western blot: Rat spleen, Mouse eye ball and SMMC-7721 whole cell lysates stained with ARG59342 anti-alpha A Crystallin antibody at 0.5 µg/ml dilution.



#### ARG59342 anti-alpha A Crystallin antibody FACS image

Flow Cytometry: HepG2 cells were blocked with 10% normal goat serum and then stained with ARG59342 anti-alpha A Crystallin antibody (blue) at 1 µg/10<sup>6</sup> cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1 µg/10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



#### ARG59342 anti-alpha A Crystallin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat spleen stained with ARG59342 anti-alpha A Crystallin antibody at 1 µg/ml dilution.