

ARG59382 anti-alpha A Crystallin antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes alpha A Crystallin
Tested Reactivity	Hu, Ms, Rat, Zfsh
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	alpha A Crystallin
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1-173 of Human alpha A Crystallin (NP_000385.1).
Conjugation	Un-conjugated
Alternate Names	CRYA1; HSPB4; CTRCT9

Application Instructions

Predict Reactivity Note	Zebrafish						
Application table	<table><thead><tr><th>Application</th><th>Dilution</th></tr></thead><tbody><tr><td>ICC/IF</td><td>1:50 - 1:100</td></tr><tr><td>WB</td><td>1:500 - 1:2000</td></tr></tbody></table>	Application	Dilution	ICC/IF	1:50 - 1:100	WB	1:500 - 1:2000
Application	Dilution						
ICC/IF	1:50 - 1:100						
WB	1:500 - 1:2000						
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.						
Positive Control	Mouse kidney						
Observed Size	23 kDa						

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
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. 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.

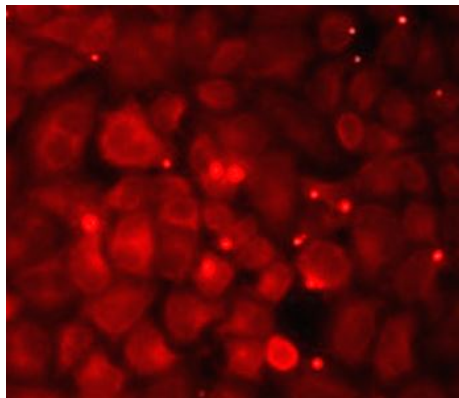
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

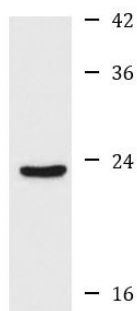
Gene Symbol	CRYAA
Gene Full Name	crystallin alpha A
Background	Mammalian lens crystallins are divided into alpha, beta, and gamma families. Alpha crystallins are composed of two gene products: alpha-A and alpha-B, for acidic and basic, respectively. Alpha crystallins can be induced by heat shock and 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



ARG59382 anti-alpha A Crystallin antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG59382 anti-alpha A Crystallin antibody.



Mouse kidney

ARG59382 anti-alpha A Crystallin antibody WB image

Western blot: 25 µg of Mouse kidney lysate stained with ARG59382 anti-alpha A Crystallin antibody at 1:1000 dilution.