

ARG56910 anti-alpha A Crystallin antibody [c9F2]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [c9F2] recognizes alpha A Crystallin
Tested Reactivity	Hu, Rat
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Clone	c9F2
Isotype	IgG1, kappa
Target Name	alpha A Crystallin
Species	Human
Immunogen	Recombinant fragment around aa. 1-173 of Human alpha A Crystallin.
Conjugation	Un-conjugated
Alternate Names	CRYA1; HSPB4; CTRCT9

Application Instructions

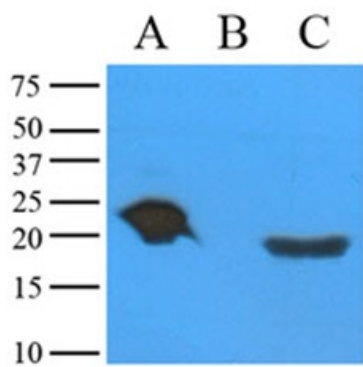
Application table	Application	Dilution
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 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. 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.

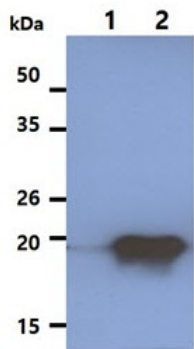
Database links	GeneID: 1409 Human GeneID: 24273 Rat Swiss-port # P02489 Human Swiss-port # P24623 Rat
Gene Symbol	CRYAA
Gene Full Name	crystallin alpha A
Background	Mammalian lens crystallins are divided into alpha, beta, and gamma families. Alpha crystallins are composed of two gene products: alpha-A 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

Images



ARG56910 anti-alpha A Crystallin antibody [c9F2] WB image

Western blot: Mouse eye extracts and recombinant proteins (Crystallin-alpha A and B) stained with ARG56910 anti-alpha A Crystallin antibody [c9F2] at 1:1000. This antibody is not shown cross-activity about Crystallin alpha B. A: Crystallin-alpha A recombinant protein B: Crystallin-alpha B recombinant protein C: Mouse eye lysates.



ARG56910 anti-alpha A Crystallin antibody [c9F2] WB image

Western blot: 5 µg of 1) 293T cell lysate, 2) Crystallin alpha A Transfected 293T cell lysate stained with ARG56910 anti-alpha A Crystallin antibody [c9F2] at 1:3000.