

ARG22216 anti-alpha B Crystallin antibody [1A7.D5]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [1A7.D5] recognizes alpha B Crystallin
Tested Reactivity	Hu, Rat, Bov, Pig
Tested Application	ELISA, ICC/IF, WB
Specificity	Detects ~20kDa (Predicted mol. weight is ~21kDa). Does not cross-react with αA-crystallin, βL-crystallin, βH-crystallin, γ-crystallin, HSP25, HSP27 or HSP47 proteins.
Host	Mouse
Clonality	Monoclonal
Clone	1A7.D5
Isotype	IgG1
Target Name	alpha B Crystallin
Species	Human
Immunogen	Native Alpha B Crystallin
Conjugation	Un-conjugated
Alternate Names	HSPB5; Rosenthal fiber component; Renal carcinoma antigen NY-REN-27; MFM2; Alpha; CTRCT16; B; HspB5; Heat shock protein beta-5; HEL-S-101; CTPP2; CMD1II; CRYA2; Alpha-crystallin B chain

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	ICC/IF	1:100
	WB	1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

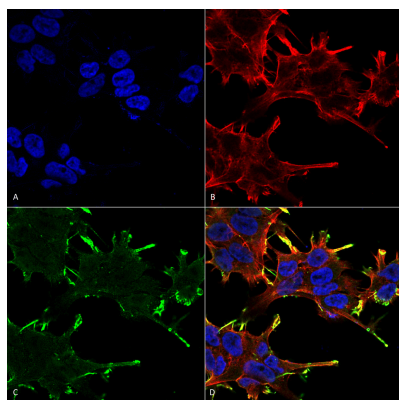
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.2), 0.09% Sodium azide and 50% Glycerol
Preservative	0.09% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml

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.

Bioinformation

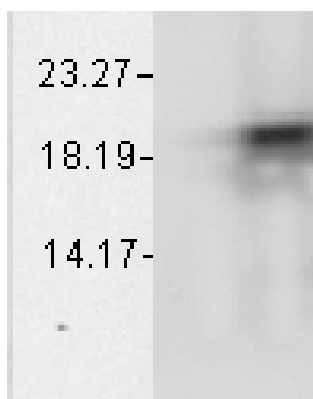
Gene Symbol	CRYAB
Gene Full Name	crystallin, alpha B
Background	Mammalian lens crystallins are divided into alpha, beta, and gamma families. Alpha crystallins are composed of two gene products: alpha-A and alpha-B, for acidic and basic, respectively. Alpha crystallins can be induced by heat shock and 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. Elevated expression of alpha-B crystallin occurs in many neurological diseases; a missense mutation cosegregated in a family with a desmin-related myopathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]
Function	May contribute 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]
Highlight	Related products: anti-alpha B Crystallin antibody [1A7.D5]
Calculated Mw	20 kDa
Cellular Localization	Cytoplasm, Nucleus

Images



ARG22216 anti-alpha B Crystallin antibody [1A7.D5] ICC/IF image

Immunofluorescence: Human Neuroblastoma cell line SK-N-BE. Fixation: 4% Formaldehyde for 15 min at RT. Primary antibody: ARG22216 anti-alpha B Crystallin antibody [1A7.D5] at 1:100 for 60 min at RT. Secondary antibody: Goat anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Magnification: 60X. (A) DAPI (blue) nuclear stain. (B) Phalloidin Texas Red F-Actin stain. (C) Primary antibody. (D) Composite.



ARG22216 anti-alpha B Crystallin antibody [1A7.D5] WB image

Western blot: 15 µg of Bovine cell lysates stained with ARG22216 anti-alpha B Crystallin antibody [1A7.D5] at 1:50 dilution (2 hours at RT).