

ARG22217 anti-alpha B Crystallin antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes alpha B Crystallin
Tested Reactivity	Hu, Ms, Rat, Bov, Chk
Tested Application	ICC/IF, IHC-P, WB
Specificity	Detects ~22kDa. Does not cross-react with αA-crystallin.
Host	Rabbit
Clonality	Polyclonal
Target Name	alpha B Crystallin
Species	Human
Immunogen	KLH-conjugated synthetic peptide from Human 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; CMD11I; CRYA2; Alpha-crystallin B chain

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:120
	IHC-P	1:120
	WB	1:5000

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

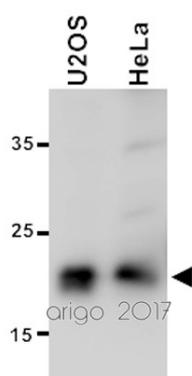
Properties

Form	Liquid
Purification	Rabbit antiserum.
Buffer	Rabbit Antiserum
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.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

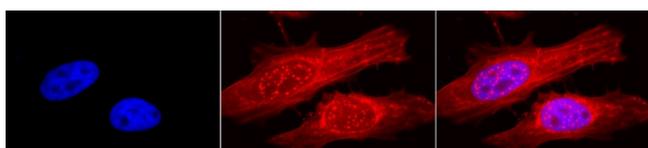
Gene Symbol	CRYAB
Gene Full Name	crystallin, alpha B
Background	Mammalian lens crystallins are divided into alpha, beta, and gamma families. Alpha crystallins are composed of two gene products: alpha-A and alpha-B, for acidic and basic, respectively. Alpha crystallins can be induced by heat shock and 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]
Calculated Mw	20 kDa
Cellular Localization	Cytoplasm, Nucleus

Images



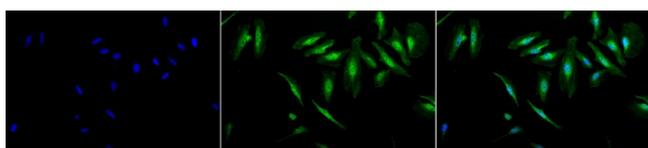
ARG22217 anti-alpha B Crystallin antibody WB image

Western blot: 20 µg of U2OS and HeLa cell lysates stained with ARG22217 anti-alpha B Crystallin antibody at 1:1000 dilution.



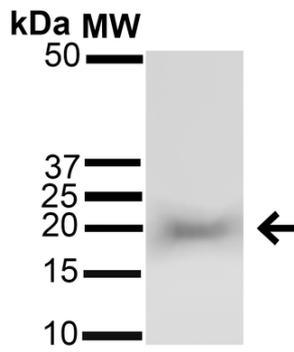
ARG22217 anti-alpha B Crystallin antibody ICC/IF image

Immunocytochemistry: 2% Formaldehyde (20 min at RT) fixed Heat Shocked HeLa cells stained with ARG22217 anti-alpha B Crystallin antibody (red) at 1:120 dilution (12 hours at 4°C). Counterstain: DAPI (blue) nuclear stain at 1:40000 for 120 min at RT. Magnification: 100x. Left: DAPI (blue) nuclear stain, Middle: Primary antibody, Right: Composite.



ARG22217 anti-alpha B Crystallin antibody ICC/IF image

Immunocytochemistry: 2% Formaldehyde (20 min at RT) fixed Heat Shocked HeLa cells stained with ARG22217 anti-alpha B Crystallin antibody (green) at 1:120 dilution (12 hours at 4°C). Counterstain: DAPI (blue) nuclear stain at 1:40000 for 120 min at RT. Magnification: 20x. Left: DAPI (blue) nuclear stain, Middle: Primary antibody, Right: Composite.



ARG22217 anti-alpha B Crystallin antibody WB image

Western blot: 15 μ g of Rat Brain cell lysates stained with ARG22217 anti-alpha B Crystallin antibody at 1:1000 for 60 min at RT. Block: 5% Skim Milk in 1X TBST. Secondary Antibody: Goat anti-Rabbit IgG: HRP at 1:1000 for 60 min at RT. Color Development: ECL solution for 6 min in RT.