

ARG24114 anti-alpha B Crystallin antibody [1A7.D5] (APC)

Package: 100 µg
Store at: -20°C

Summary

Product Description	APC-conjugated 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	APC
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
	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