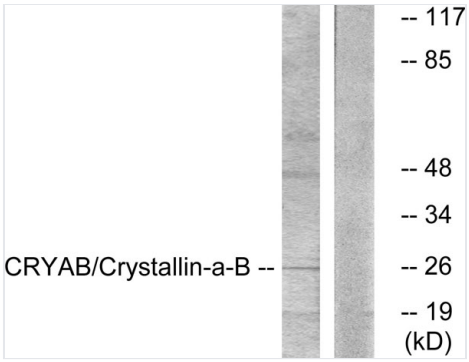
CRYAB Antibody

PRODUCT OVERVIEW

Product Name	CRYAB, Antibody
Full Product Name	CRYAB (Ab-59) Antibody
Product Gene Name	anti-CRYAB antibody
Product Synonym Names	Alpha crystallin B chain; Alpha(B)-crystallin; CRYA2; P23; Rosenthal fiber component; crystallin; alphaB
Species Reactivity	Human, Mouse, Rat
Form/Format	In phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	Affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Specificity	CRYAB/Crystallin-alpha-B (Ab-59) antibody detects endogenous levels of total CRYAB/Crystallin-alpha-B protein.
Preparation and Storage	Store at-20 degree C for 1 year.
Molecular Weight	20,159 Da
OMIM	123590
3D Structure	ModBase 3D Structure for P02511
Immunogen	The antiserum was produced against synthesized non-phosphopeptide derived from human CRYAB/Crystallin-alpha-B around the phosphorylation site of serine 59 (A-P-SP-W-F).
Product Categories/Family for anti-CRYAB antibody	Autophagy antibody; Cancer; Cardiovascular; Cell Biology; Epigenetics & Nuclear Signaling; Developmental Biologys; Immunology; Drug Discovery Products; Metabolism; Neuroscience; Signal Transduction; Stem Cells
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CRYAB antibody	Western Blot (WB), Immunohistochemistry (IHC), ELISA (EIA)
Application Notes for anti-CRYAB antibody	WB: 1:500~1:1000 IHC: 1:50~1:100 ELISA: 1:5000
Related Product Information for anti-CRYAB antibody	MBS858792 is an antibody targeting CRYAB. Also known as CRYAB (Ab-59) Antibody. Reactive in Human, Mouse, Rat.
Product References and Citations for anti-CRYAB antibody	Dubin R.A., Genomics 7:594-601(1990). Iwaki A., Neurosci. Lett. 140:89-92(1992). Kovalyov L.I., Electrophoresis 16:1160-1169(1995). Scanlan M.J., Int. J. Cancer 83:456-464(1999).
Other Notes	Small volumes of anti-CRYAB antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-CRYAB antibody
Western blot analysis of extracts from K562 cells, treated with Ca2+ (40nM, 30mins), using CRYAB/Crystallin-alpha-B (Ab-59) antibody.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CRYAB. It may not necessarily be applicable to this product.

NCBI GI #	577019571
NCBI GeneID	1410
NCBI Accession #	NP_001276736.1
UniProt Primary Accession #	P02511
UniProt Secondary Accession #	O43416; Q9UC37; Q9UC38; Q9UC39; Q9UC40; Q9UC41; B0YIX0
UniProt Related Accession #	P02511
GenBank Nucleotide #	NM_001289807.1
NCBI Official Full Name	alpha-crystallin B chain isoform 1
NCBI Official Synonym Full Names	crystallin alpha B
NCBI Official Symbol	CRYAB
NCBI Official Synonym Symbols	MFM2; CRYA2; CTPP2; HSPB5; CMD1II; CTRCT16; HEL-S-101
UniProt Protein Name	Alpha-crystallin B chain
UniProt Synonym Protein Names	Alpha(B)-crystallin; Heat shock protein beta-5; HspB5; Renal carcinoma antigen NY-REN-27; Rosenthal fiber component
Protein Family	Alpha-crystallin
UniProt Gene Name	CRYAB
UniProt Synonym Gene Names	CRYA2; HSPB5; HspB5
NCBI Protein Information	alpha-crystallin B chain

NCBI Summary for CRYAB	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]
UniProt Comments for CRYAB	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.
Research Articles on CRYAB	**1.** Our findings suggest that serum level of miR-491 has potential as a biomarker for predicting OS progression and prognosis of OS patients. miR-491 exerts its role by directly targeting alphaB-crystallin (CRYAB) in OS.
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