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Product datasheet for SA6019

Alpha-crystallin B chain / CRYA2 Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Alpha-crystallin B chain / CRYA2 human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MDIAIHHPWI RRPFFPFHSP SRLFDQFFGE HLLESDLFPT STSLSPFYLR PPSFLRAPSW FDTGLSEMRL EKDRFSVNLD VKHFSPEELK VKVLGDVIEV HGKHEERQDE HGFISREFHR KYRIPADVDP LTITSSLSSD GVLTVNGPRK QVSGPERTIP ITREEKPAVT AAPKK
Predicted MW:	20.2 kDa
Concentration:	lot specific
Purity:	≥95 by SDS-PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 7.5) containing 50 mM NaCl, 1 mM EDTA
Preparation:	Liquid purified protein
Protein Description:	Recombinant Human Crystallin alpha B produced in E.coli
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_001276736
Locus ID:	1410
UniProt ID:	P02511, V9HW27
Cytogenetics:	11q23.1
Synonyms:	CMD1II; CRYA2; CTPP2; CTRCT16; HEL-S-101; HSPB5; MFM2

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Summary: 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. 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 2019]

Product images: