

Recombinant Full Length Human CRYAB Protein, GST-tagged

Cat. No. CRYAB-2128HF **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human CRYAB full-length ORF (AAH07008, 1 a.a. - 175 a.a.) recombinant protein with GST-tag at N-terminal.
Species	Human
Source	In Vitro Cell Free System
ProteinLength	175 amino acids
Description	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-

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	related myopathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]
Molecular Mass	44.99 kDa
AA Sequence	MDIAIHHPWIRRPFFPFHSPSRLFDQFFGEHLLESDFPTSTLSPFYLRPPSFLRAP SWFDTGLPEMRLEKDRFSVNLDVKHFSPEELKVKVLGDVIEVHGKHEERQDEHGFI SREFHRKYRIPADVDPLTITSSLSSDGVLTVNGPRKRVSGPERTIPITREEKPAVTAA PKK
Applications	Enzyme-linked Immunoabsorbent Assay Western Blot (Recombinant protein) Antibody Production Protein Array
Notes	Best use within three months from the date of receipt of this protein.
Storage	Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
GENE INFORMATION	
Gene Name	CRYAB crystallin, alpha B [Homo sapiens]
Official Symbol	CRYAB
Synonyms	CRYAB; crystallin, alpha B; CRYA2; alpha-crystallin B chain; HSPB5; heat shock protein beta-5; rosenthal fiber component; heat-shock 20 kD like-protein; renal carcinoma antigen NY-REN-27; CTPP2

Gene ID	1410
mRNA Refseq	NM_001885
Protein Refseq	NP_001876
MIM	123590
UniProt ID	P02511

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