Recombinant Full Length Human CRYAA Protein, C-Flag-tagged

Cat. No. CRYAA-1133HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human CRYAA Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
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. Defects in this gene cause autosomal dominant congenital cataract (ADCC).

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

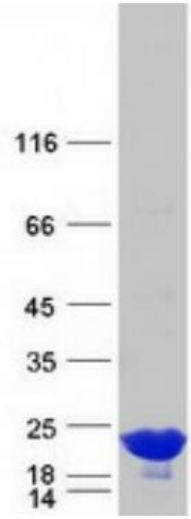
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Molecular Mass	19.7 kDa
AA Sequence	MDVTIQHPWFKRTLGPFYPSRLFDQFFGEGLFEYDLLPFLSSTISPYYRQSLFRTVLD SGISEVRSDRDK FVIFLDVKHFSPEDLTVKVQDDFVEIHGKHNERQDDHGYISREFH RRYRLPSNVDQSALSCSLSADGMLT FCGPKIQTGLDATHAERAIPVSREEKPTSAPSSTRTRPLEQKLISEEDLAANDILDYKD DDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade.
Concentration	>50 ug/mL as determined by microplate BCA method.
Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Full Length	Full L.

GENE INFORMATION

Gene Name	CRYAA crystallin alpha A [Homo sapiens (human)]
Official Symbol	CRYAA
Synonyms	CRYA1; HSPB4; CTRCT9

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Gene ID	1409
mRNA Refseq	NM_000394.4
Protein Refseq	NP_000385.1
MIM	123580
UniProt ID	P02489



Coomassie blue staining of purified CRYAA protein.

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