

# 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).

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

## GENE INFORMATION

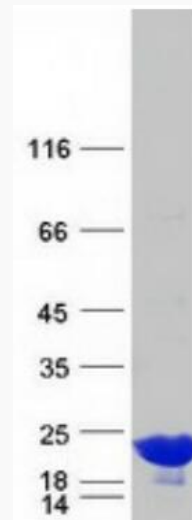
<b>Gene Name</b>	CRYAA crystallin alpha A [ Homo sapiens (human) ]
<b>Official Symbol</b>	CRYAA
<b>Synonyms</b>	CRYA1; HSPB4; CTRCT9

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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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