

Recombinant Full Length Human CRYBA1 Protein, GST-tagged

Cat. No. CRYBA1-2129HF **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Human CRYBA1 full-length ORF (NP_005199.2, 1 a.a. - 215 a.a.) recombinant protein with GST-tag at N-terminal.

Species

Human

Source

In Vitro Cell Free System

ProteinLength

215 amino acids

Description

Crystallins are separated into two classes: taxon-specific, or enzyme, and ubiquitous. The latter class constitutes the major proteins of vertebrate eye lens and maintains the transparency and refractive index of the lens. Since lens central fiber cells lose their nuclei during development, these crystallins are made and then retained throughout life, making them extremely stable proteins. Mammalian lens crystallins are divided into alpha, beta, and gamma families; beta and gamma crystallins are also considered as a superfamily. Alpha and beta families are further divided into acidic and basic groups. Seven protein regions exist in crystallins: four homologous motifs, a connecting peptide, and N- and C-terminal extensions. Beta-crystallins, the most heterogeneous, differ by the presence of the C-terminal extension (present in the basic group, none in the acidic group). Beta-crystallins form aggregates of different sizes and are able to self-associate to form dimers or to form heterodimers with other beta-crystallins. This gene, a beta acidic group member, encodes two proteins (crystallin, beta A3 and crystallin, beta A1) from a single mRNA, the latter

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protein is 17 aa shorter than crystallin, beta A3 and is generated by use of an alternate translation initiation site. Deletion of exons 3 and 4 causes the autosomal dominant disease 'zonular cataract with sutural opacities'. [provided by RefSeq, Jul 2008]

Molecular Mass 51.5 kDa

AA Sequence
 METQAEQQELETLPPTTKMAQTNPTPGSLGPWKITIYDQENFQGKRMEFTSSCPNVS
 ERSFDNVRSCLKVESGAWIGYEHTSFCGQQFILERGEYPRWDAWSGSNAYHIERLM
 SFRPICSANHKESKMTIFEKENFIGRQWEISDDYPSLQAMGWFNNEVGSMKIQSGA
 WVCYQYPGYRGYQYILECDHHGGDYKHWREWGSHAQTSQIQSIRRIQQ

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 [CRYBA1 crystallin, beta A1 \[Homo sapiens \]](#)

Official Symbol [CRYBA1](#)

Synonyms CRYBA1; crystallin, beta A1; CRYB1; beta-crystallin A3; eye lens structural protein; crystallin, beta A3

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Gene ID	1411
mRNA Refseq	NM_005208
Protein Refseq	NP_005199
MIM	123610
UniProt ID	P05813

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