Recombinant Human CRYGS, His-tagged

Cat. No. CRYGS-27478TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human Beta crystallin S with an N terminal His tag; 202 amino acids with the tag; predicted MWt: 23.6 kDa.
Species	Human
Source	E.coli
ProteinLength	178 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. Gamma-crystallins are a homogeneous group of highly symmetrical, monomeric proteins typically lacking connecting peptides and terminal extensions. They are differentially regulated after early development. This gene encodes a protein initially considered to be a beta-crystallin but the encoded protein is monomeric and has greater sequence similarity to other gamma-crystallins. This gene encodes the most significant gamma-crystallin in adult eye lens tissue. Whether due to aging or mutations in specific genes, gamma-

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	crystallins have been involved in cataract formation.
Conjugation	HIS
Molecular Weight	23.600kDa inclusive of tags
Form	Liquid
Purity	>95% by SDS-PAGE
Storage buffer	pH: 8.00Constituents:10% Glycerol, 0.02% DTT, 0.58% Sodium chlorideNote: Contains 89% Tris-HCl buffer.
Storage	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Sequences of amino acids	MGSSHHHHHHSSGLVPRGSHMGSHMSKTGTKITFYEDKNFQGRRYDCDCDCADF HTYLSRCNSIKVEGGTWAVYERPNFAGYMYILPQGEYPEYQRWMGLNDRLSSCRA VHLPSGGQYKIQIFEKGDFSGQMYETTEDCPSIMEQFHMREIHSCKVLEGVWIFYEL PNYRGRQYLLDKKEYRKPIDWGAASPAVQSFRRIVE
Sequence Similarities	Belongs to the beta/gamma-crystallin family.Contains 4 beta/gamma crystallin Greek key domains.

GENE INFORMATION

Gene Name	CRYGS crystallin, gamma S [Homo sapiens]
Official Symbol	CRYGS
Synonyms	CRYGS; crystallin, gamma S; CRYG8; beta-crystallin S; crystallin; gamma 8;

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Gene ID	1427
mRNA Refseq	NM_017541
Protein Refseq	NP_060011
Uniprot ID	P22914
Chromosome Location	3
Function	structural constituent of eye lens;

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