

Product datasheet for PH310159

OriGene Technologies, Inc.

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Beta crystallin S (CRYGS) (NM_017541) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

Description: CRYGS MS Standard C13 and N15-labeled recombinant protein (NP_060011)

Species:HumanExpression Host:HEK293

Expression cDNA Clone

e RC210159

or AA Sequence: Predicted MW:

21 kDa

Protein Sequence: >RC210159 protein sequence

Red=Cloning site Green=Tags(s)

MSKTGTKITFYEDKNFQGRRYDCDCDCADFHTYLSRCNSIKVEGGTWAVYERPNFAGYMYILPQGEYPEY QRWMGLNDRLSSCRAVHLPSGGQYKIQIFEKGDFSGQMYETTEDCPSIMEQFHMREIHSCKVLEGVWIFY

ELPNYRGRQYLLDKKEYRKPIDWGAASPAVQSFRRIVE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Storage: Store at -80°C. Avoid repeated freeze-thaw cycles.

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 060011

RefSeq Size: 843 RefSeq ORF: 534

Synonyms: CRYG8; CTRCT20

Locus ID: 1427

UniProt ID: <u>P22914</u>, <u>A0A140CTX8</u>





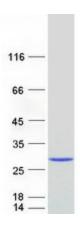
Cytogenetics:

3q27.3

Summary:

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-crystallins have been involved in cataract formation. [provided by RefSeq, Jul 2008]

Product images:



Coomassie blue staining of purified CRYGS protein (Cat# [TP310159]). The protein was produced from HEK293T cells transfected with CRYGS cDNA clone (Cat# [RC210159]) using MegaTran 2.0 (Cat# [TT210002]).