

Product datasheet for TP322889L

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

CRYGD (NM_006891) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human crystallin, gamma D (CRYGD), 1 mg

Species: Human Expression Host: HEK293T

Expression cDNA >RC222889 protein sequence **Clone or AA** Red=Cloning site Green=Tags(s)

Sequence:

MGKITLYEDRGFQGRHYECSSDHPNLQPYLSRCNSARVDSGCWMLYEQPNYSGLQYFLRRGDYADHQQWM

 ${\tt GLSDSVRSCRLIPHSGSHRIRLYEREDYRGQMIEFTEDCSCLQDRFRFNEIHSLNVLEGSWVLYELSNYR}$

 ${\sf GRQYLLMPGDYRRYQDWGATNARVGSLRRVIDFS}$

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-Myc/DDK

Predicted MW: 20.6 kDa

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

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

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

RefSeg: NP 008822

Locus ID: 1421

UniProt ID: <u>P07320</u>, <u>A0A140CTX7</u>

RefSeq Size: 724



Cytogenetics: 2q33.3

RefSeq ORF: 522

Synonyms: CACA; CCA3; CCP; cry-g-D; CRYG4; CTRCT4; PCC

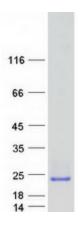
Summary: Crystallins are separated into two classes: taxon-specific, or enzyme, and ubiquitous. The latter

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. Four gamma-crystallin genes (gamma-A through gamma-D) and three pseudogenes (gamma-E, gamma-F, gamma-G) are tandemly organized in a genomic segment as a gene cluster. Whether due to aging or mutations in specific genes, gamma-crystallins have been involved in cataract

formation. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome

Product images:



Coomassie blue staining of purified CRYGD protein (Cat# [TP322889]). The protein was produced from HEK293T cells transfected with CRYGD cDNA clone (Cat# [RC222889]) using MegaTran 2.0 (Cat# [TT210002]).