

Product datasheet for **RG222889**

CRYGD (NM_006891) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CRYGD (NM_006891) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: CRYGD
Synonyms: CACA; CCA3; CCP; cry-g-D; CRYG4; CTRCT4; PCC
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG222889 representing NM_006891
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGAAGATCACCTCTACGAGGACCGGGCTTCCAGGGCCGCCACTACGAATGCAGCAGCGACCACC
 CCAACCTCGAGCCCTACTTGAGCCGCTGCAACTCGGCGCGCTGGACAGCGGCTGCTGGATGCTCTATGA
 GCAGCCCACTACTCGGGCTCCAGTACTTCTGCGCCGCGGCGACTATGCCACCACAGCAGTGGATG
 GGCTCAGCGACTCGGTCCGCTCCTGCCCTCATCCCCACTCTGGCTCTCACAGGATCAGACTCTATG
 AGAGGGAGGACTACAGAGCCAGATGATAGAGTCACTGAGGACTGCTCCTGTCTTCAGGACCGCTCCG
 TTCAATGAAATCCACTCCCTCAACGTGCTGGAGGGCTCCTGGTCTCTACGAGCTGTCCAACACCGA
 GGACGGCAGTACCTGCTGATGCCAGGGGACTATAGGCGCTACCAGGACTGGGGGCCACGAATGCCAGAG
 TGGGCTCTCTGAGGAGAGTCATAGATTTCTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG222889 representing NM_006891
 Red=Cloning site Green=Tags(s)

MGKITLYEDRGFQGRHYECSSDHPNLQPYLSRCNSARVDSGCWMLYEQPNYSGLQYFLRRGDYADHQQWM
 GLSDSVRSCLIPHSRSHRIRLYEREDYRQMIEFTEDCSCLQDRFRFNEIHSNLVLEGSWVLYELSNYR
 GRQYLLMPGDYRRYQDWGATNARVGLRRVIDFS

TRTRPLE - GFP Tag - V

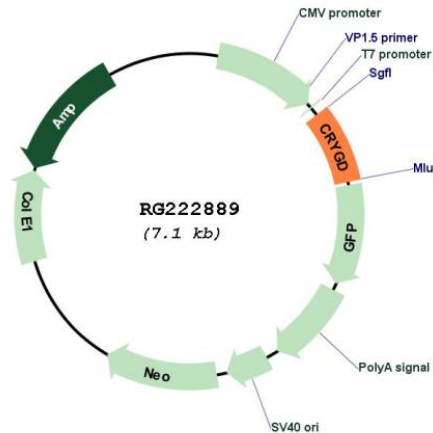
Restriction Sites: SgfI-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM_006891

ORF Size: 522 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_006891.2</u> , <u>NP_008822.2</u>
RefSeq Size:	606 bp
RefSeq ORF:	525 bp
Locus ID:	1421
UniProt ID:	<u>P07320</u>
Cytogenetics:	2q33.3
Protein Families:	Druggable Genome
Gene 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]