

Product datasheet for RC210386

gamma C Crystallin (CRYGC) (NM_020989) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: gamma C Crystallin (CRYGC) (NM_020989) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: gamma C Crystallin
Synonyms: CCL; CRYG3; CTRCT2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC210386 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGAAGATCACCTTCTATGAGGACAGGGCCTTCCAGGGCCGAGCTACGAAACCACCACTGACTGCC
CCAACCTGCAGCCGTATTCAGCCGCTGCAACTCCATCCGGTGGAGAGCGGCTGCTGGATGCTCTATGA
GCGTCCCAACTACCAAGGTCAACAATACTTGTGCGGCGAGGGGAGTACCCGACTACCAGCAATGGATG
GGCCTCAGCGACTCCATCCGCTCCTGTTGTCTCATCCCCAAACAGTCTCCACAGGCTGCGGCTGTACG
AGAGGGAAGACCACAAAGCCTCATGATGGAGCTGAGTGAAGACTGCCCCAGCATCCAGGACCGCTCCA
CCTCAGCGAGATCCGTTCCCTCCACGTGCTGGAGGGCTGCTGGTCTCTACGAGCTGCCAACTACCGG
GGCGGCAATACCTGCTGAGGCCCAAGAGTACAGGCGGTGCCAGGACTGGGGGCCATGGATGCTAAGG
CAGGCTCTTTCGGGAGAGTGGTGGATTTGTAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC210386 protein sequence
Red=Cloning site Green=Tags(s)

MGKITFYEDRAFQGRSYETTTDCPNLQPYFSRCNSIRVESGCWMLYERPNYQQQYLLRRGEYPDYQQWM
GLSDSIRSCCLIPQTVSHRLRLYEREDHKGLMMELSEDCPSIQDRFHLSEIRSLHVLEGCWVLYELPNYR
GRQYLLRPQEYRRCQDWGAMDAKAGSLRRVVDLY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6374_a09.zip



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020989

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:

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: [NM_020989.4](#)

RefSeq Size: 645 bp

RefSeq ORF: 525 bp

Locus ID: 1420

UniProt ID: [P07315](#)

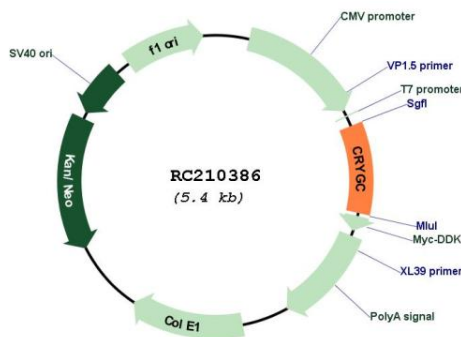
Cytogenetics: 2q33.3

Protein Families: Druggable Genome

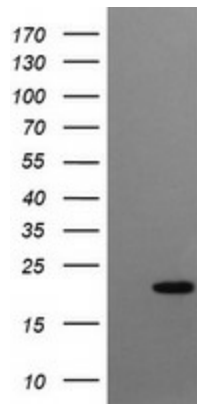
MW: 20.9 kDa

Gene Summary: This gene encodes a member of the beta/gamma-crystallin family of proteins. Crystallins constitute the major proteins of vertebrate eye lens and maintain the transparency and refractive index of the lens. This gene and several family members are present in a gene cluster on chromosome 2. Mutations in this gene have been shown to cause multiple types of cataract, including Coppock-like cataract and zonular pulverulent cataract, among others. [provided by RefSeq, Jan 2015]

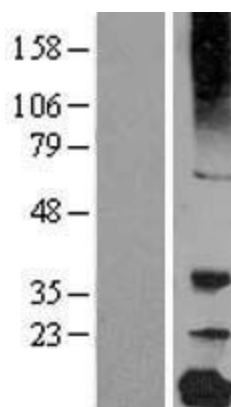
Product images:



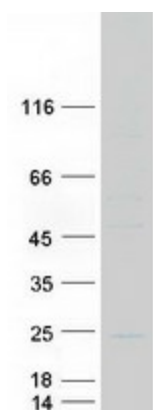
Circular map for RC210386



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CRYGC (Cat# RC210386, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CRYGC (Cat# [TA505801]). Positive lysates [LY412154] (100ug) and [LC412154] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY412154]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210386 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CRYGC protein (Cat# [TP310386]). The protein was produced from HEK293T cells transfected with CRYGC cDNA clone (Cat# RC210386) using MegaTran 2.0 (Cat# [TT210002]).