

Product datasheet for RC210125

CRYBB2 (NM_000496) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CRYBB2 (NM_000496) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CRYBB2
Synonyms: CCA2; CRYB2; CRYB2A; CTRCT3; D22S665
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC210125 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCTCAGATCACCAGACCCAGGCGGGCAAGCCACAGTCCCTCAACCCCAAGATCATCATCTTTGAGC
 AGGAAACTTTCAAGGCCACTCGCATGAGCTCAATGGGCCCTGCCCAACCTGAAGGAACTGGCGTGGA
 GAAGGCAGTTCTGTCTAGTGCAGGCTGGACCCTGGGTGGGCTATGAACAGGCCAACTGCAAGGGCGAG
 CAGTTTGTGTTTGAAGGGTGAAGTACCCCGCTGGGACTCATGGACCAGCAGCCGAAGGACGGACTCCC
 TCAGCTCCCTGAGGCCATCAAAGTGGACAGCCAAGAGACAAGATCATCCTCTATGAAAACCCCAACTT
 CACCGGGAAGAAGATGGAAATCATAGATGACGATGTACCCAGCTTCCACGCCCATGGCTACCAGGAGAAG
 GTGTCATCTGTGCGGGTGCAGAGTGGCAGTGGGTTGGCTACCAGTACCCCGGCTACCGTGGGCTGCACT
 ACCTGCTGGAGAAGGGAGACTACAAGGACAGCAGCGACTTTGGGGCCCTCACCCCAAGTGCAGTCCGT
 GCGCCGTATCCGCACATGCAGTGGCACCACGTGGTGCCTTCCACCCCTCCAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC210125 protein sequence
 Red=Cloning site Green=Tags(s)

MASDHQTQAGKPQSLNPKIIIFEQENFQGSHELNGPCPNLKETGVEKAGSVLVQAGPWVGYEQANCKGE
 QFVFEKGEYPRWDSWTSRRRDSLSSLRPIKVDSEHKIILYENPNFTGKKMEIIDDDVPSFHAHGQYQEK
 VSSVRVQSGTWVGYQYPGYRGLQYLLEKGDYKDSDFGAPHPQVQSVRRIRDMQWHQRGAFHPSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6370_c05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000496

ORF Size: 615 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_000496.3](#)

RefSeq Size: 781 bp

RefSeq ORF: 618 bp

Locus ID: 1415

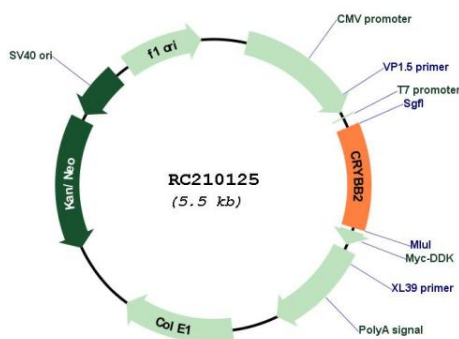
UniProt ID: [P43320](#)

Cytogenetics: 22q11.23

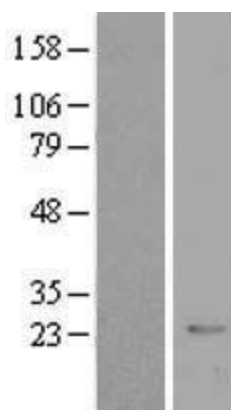
MW: 23.4 kDa

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. Beta-crystallins, the most heterogeneous, differ by the presence of the C-terminal extension (present in the basic group, none in the acidic group). Beta-crystallins form aggregates of different sizes and are able to self-associate to form dimers or to form heterodimers with other beta-crystallins. This gene, a beta basic group member, is part of a gene cluster with beta-A4, beta-B1, and beta-B3. A chain-terminating mutation was found to cause type 2 cerulean cataracts. [provided by RefSeq, Jul 2008]

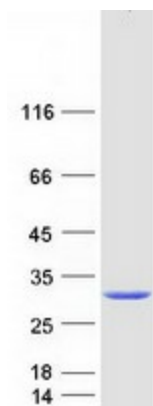
Product images:



Circular map for RC210125



Western blot validation of overexpression lysate (Cat# [LY424684]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210125 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CRYBB2 protein (Cat# [TP310125]). The protein was produced from HEK293T cells transfected with CRYBB2 cDNA clone (Cat# RC210125) using MegaTran 2.0 (Cat# [TT210002]).