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Product datasheet for RC216611

CRYBB3 (NM_004076) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CRYBB3 (NM_004076) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CRYBB3
Synonyms:	CATCN2; CRYB3; CTRCT22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC216611 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGAACAGCACGGAGCACCCGAACAGGCTGCAGCTGGCAAGAGCCATGGAGACCTTGGGGGCAGCT
ACAAGGTGATCTTGTACGAACTAGAGAACTTCCAAGGCAAACGCTGCGAGCTCTCGGCCGAGTGCCCCAG
CCTGACCGACAGCCTGCTGGAGAAGGTGGGCTCCATCCAAGTGGAGTCCGGGCCGTGGCTGGCATTTGAG
TCCAGGGCCTTCCGCGGGGAGCAGTTTGTTCTGGAGAAGGGGGATTATCCTCGCTGGGATGCCTGGTCCA
ACAGCCGTGATAGTGACAGCCTTCTGTCCCTCCAGCCTCTGAATATTGATAGTCCAGATCACAAGCTGCA
TCTGTTTGAGAACCCAGCTTTCAGTGGCCGCAAGATGGAGATAGTGGATGATGACGTGCCCAGCCTGTGG
GCTCATGGCTTCCAGGACCGTGTGGCGAGTGTCCGTGCCATCAACGGGACGTGGGTTGGCTATGAGTTCC
CCGGCTACCGTGGGCGCCAGTACGTGTTTGAGCGGGGCGAGTACCGCCACTGGAATGAGTGGGACGCCAG
CCAGCCGCAGCTGCAGTCTGTGCGCCGCATCCGTGACCAGAAGTGGCACAAGCGGGGCCGCTTCCCCAGC
AGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC216611 protein sequence
Red=Cloning site Green=Tags(s)

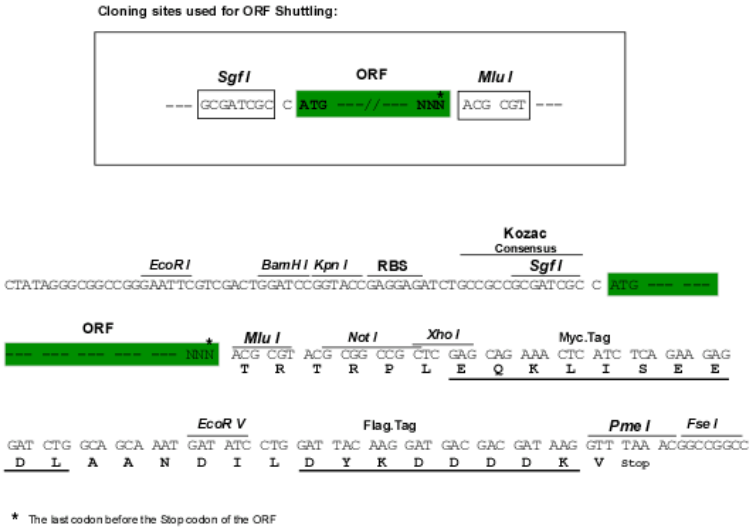
MAEQHGAPEQAAAGKSHGDLGGSYKVILYELENFQGKRCELSAECPSLTDSLLEKVGSIQVESGPWLAFE
SRAFRGEQFVLEKGDYPRWDAWSNSRDSDSLLSLQPLNIDSPDHKLHLFENPAFSGRKMEIVDDDVPSLW
AHGFQDRVASVRAINGTWVGYEFPGYRGRQYVFERGEYRHWNEWDASQPQLQSVRRIRDQKWHKRGRFPS
S

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6447_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004076

ORF Size: 633 bp

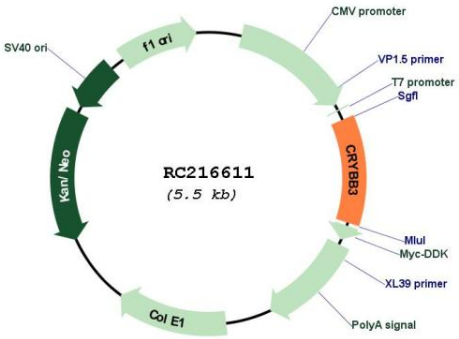
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

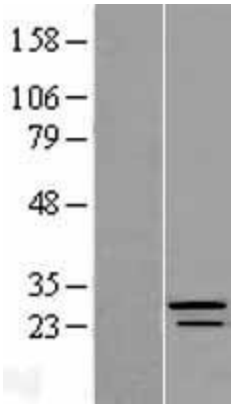
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_004076.5
RefSeq Size:	896 bp
RefSeq ORF:	636 bp
Locus ID:	1417
UniProt ID:	P26998
Cytogenetics:	22q11.23
MW:	24.2 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-B2. Mutations in this gene result in cataract congenital nuclear autosomal recessive type 2. [provided by RefSeq, Feb 2013]

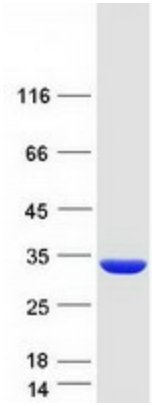
Product images:



Circular map for RC216611



Western blot validation of overexpression lysate (Cat# [LY418242]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216611 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CRYBB3 protein (Cat# [TP316611]). The protein was produced from HEK293T cells transfected with CRYBB3 cDNA clone (Cat# RC216611) using MegaTran 2.0 (Cat# [TT210002]).