

## 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<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGAACAGCACGGAGCACCCGAACAGGCTGCAGCTGGCAAGAGCCATGGAGACCTTGGGGCAGCT  
ACAAGGTGATCTTGTACGAAGTACGAGAACTTCCAAGGCAAACGCTGCGAGCTCTCGGCCGAGTCCCCAG  
CCTGACCGACAGCCTGCTGGAGAAGGTGGGCTCCATCCAAGTGGAGTCCGGGCCGTGGCTGGCATTGAG  
TCCAGGGCCTTCCGCGGGGAGCAGTTTGTCTGGAGAAGGGGATTATCCTCGCTGGGATGCCTGGTCCA  
ACAGCCGTGATAGTGACAGCCTTCTGTCCCTCCAGCCTCTGAATATTGATAGTCCAGATCACAAGCTGCA  
TCTGTTTGAGAACCCAGCTTTCAGTGGCCGCAAGATGGAGATAGTGGATGATGACGTGCCAGCCTGTGG  
GCTCATGGCTTCCAGGACCGTGTGGCGAGTGTCCGTGCCATCAACGGGACGTGGGTTGGCTATGAGTTCC  
CCGGCTACCGTGGGCGCCAGTACGTGTTTGAGCGGGGCGAGTACCGCCACTGGAATGAGTGGGACGCCAG  
CCAGCCGACGTGCAGTCTGTGCGCCGATCCGTGACCAGAAAGTGGCACAAGCGGGGCCGCTTCCCCAGC  
AGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC216611 protein sequence  
 Red=Cloning site Green=Tags(s)

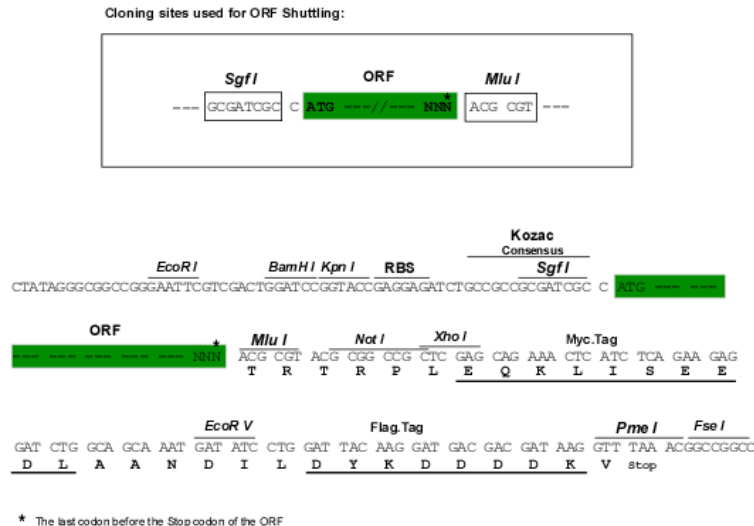
MAEQHGAPEQAAAGKSHGDLGGSYKVL YELENFQGKRCEL SAECPSLTDSLLEKVGSIQVESGPWLAFE  
 SRAFRGEQFVLEKGDYPRWDAWSNSRSDSLLSLQPLNIDSPDHKLHLFENPAFSGRKMEIVDDDVP  
 SLW AHGFQDRVASVRAINGTWVGYEFPGYRGRQYVFERGEYRHWNEWDASQPQLQSVRRIRDQKWHKGRFPS  
 S

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6447\\_a05.zip](https://cdn.origene.com/chromatograms/mk6447_a05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004076

**ORF Size:** 633 bp

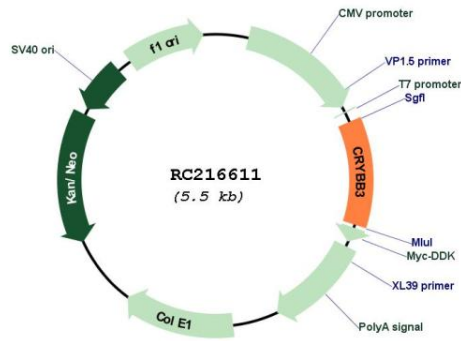
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone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

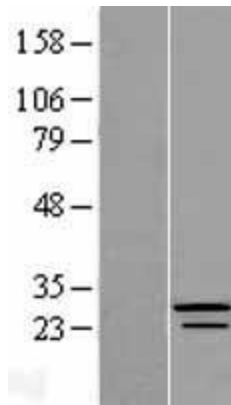
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

|                               |   |
|-------------------------------|---|
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>   |
| <b>Note:</b>                  | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.  |
| <b>RefSeq:</b>                | <u>NM_004076.5</u>  |
| <b>RefSeq Size:</b>           | 896 bp  |
| <b>RefSeq ORF:</b>            | 636 bp  |
| <b>Locus ID:</b>              | 1417  |
| <b>UniProt ID:</b>            | <u>P26998</u>   |
| <b>Cytogenetics:</b>          | 22q11.23  |
| <b>MW:</b>                    | 24.2 kDa  |
| <b>Gene Summary:</b>          | <p>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]</p> |

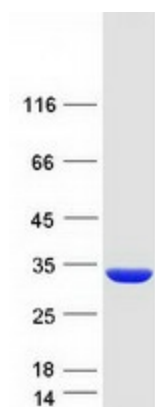
## Product images:



Circular map for RC216611



Western blot validation of overexpression lysate (Cat# [LY418242]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected 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]).