

Product datasheet for **SC300083**

CRYBB2 (NM_000496) Human Untagged Clone

Product data:

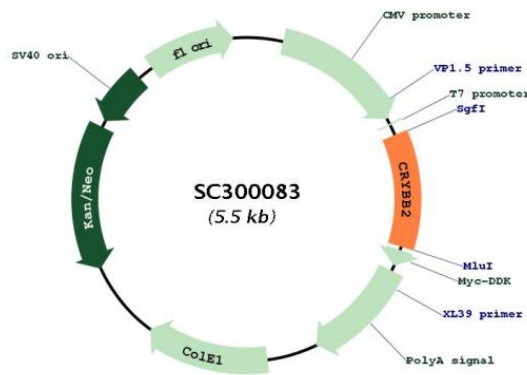
Product Type:	Expression Plasmids
Product Name:	CRYBB2 (NM_000496) Human Untagged Clone
Tag:	Tag Free
Symbol:	CRYBB2
Synonyms:	CCA2; CRYB2; CRYB2A; CTRCT3; D22S665
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC300083 representing NM_000496. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCCTCAGATCACCAGACCCAGGCGGGCAAGCCACAGTCCCTCAACCCCAAGATCATCATCTTTGAG
CAGGAAAACCTTTCAAGGCCACTCGCATGAGCTCAATGGGCCCTGCCCAACCTGAAGGAACTGGCGTG
GAGAAGGCAGGTTCTGTCTAGTGCAGGCTGGACCCTGGGTGGGCTATGAACAGGCCAACTGCAAGGGC
GAGCAGTTTGTGTTGAGAAGGGTGAGTACCCCGCTGGGACTCATGGACCAGCAGCCGAAGGACGGAC
TCCCTCAGCTCCCTGAGGCCATCAAAGTGGACAGCCAAGAGCACAAGATCATCTCTATGAAAACCCC
AACTTCACCGGAAGAAGATGGAATCATAGATGACGATGTACCCAGCTCCACGCCCATGGCTACCAG
GAGAAGGTGTATCTGTGCGGGTGCAGAGTGGCACGTGGGTTGGCTACCAGTACCCCGGCTACCGTGGG
CTGCAGTACCTGTGGAGAAGGGAGACTACAAGGACAGCAGCGACTTTGGGGCCCTCACCCCAAGGTG
CAGTCCGTGCGCCGATCCGCGACATGCAGTGGCACCAACGTGGTGCCTTCCACCCCTCCAACTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: Sgfl-MluI



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Plasmid Map:


ACCN: NM_000496

Insert Size: 618 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_000496.2](#)
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]