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Product datasheet for RG223668

CRYBA2 (NM_057093) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CRYBA2 (NM_057093) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CRYBA2
Synonyms:	CTRCT42
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG223668 representing NM_057093
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCAGCGCCCCCGCGCCGGGCCCGGCGCCCGCCAGCCTCACGCTCTGGGACGAGGAGGACTTCCAGG
GCCGTCGCTGTCGGCTGCTAAGCGACTGTGCGAACGTCTGCGAGCGCGGAGGCCTGCCCAGGGTGCGCTC
GGTCAAGGTGGAAAACGGCGTTTGGGTGGCCTTTGAGTACCCCGACTTCCAGGGACAGCAGTTCATTCTG
GAGAAGGGAGACTATCCTCGCTGGAGCGCCTGGAGTGGCAGCAGCAGCCACAACAGCAACCAGCTGCTGT
CCTTCCGGCCAGTGCTCTGCGCGAACCACAATGACAGCCGTGTGACACTGTTTGAGGGGGACAACTTCCA
AGGCTGCAAGTTTGACCTCGTTGATGACTACCCATCCCTGCCCTCCATGGGCTGGGCCAGCAAGGATGTG
GGTTCCCTCAAAGTCAGCTCCGGAGCGTGGGTGGCCTACCAGTACCCAGGCTACCGAGGCTACCAGTATG
TGTTGGAGCGGGACCGGCACAGCGGAGAGTTCTGTACTTACGGTGAGCTCGGCACACAGGCCCACACTGG
GCAGCTGCAGTCCATCCGGAGAGTCCAGCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG223668 representing NM_057093
Red=Cloning site Green=Tags(s)

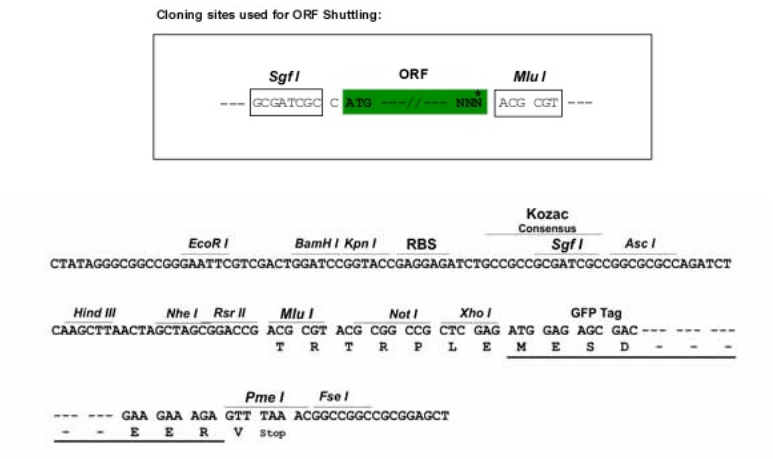
MSSAPAPGPAPASLTLWDEEDFQGRRCRLLSDCANVCERGGLPRVRSVKVENGVWVAFEYPDFQGQQFIL
EKGDYPRWSAWSGSSSHNSNQLLSFRPVLCANHNDSRVTLFEGDNFQGCKFDLVDDYPSLPSMGWASKDV
GSLKVSSGAWVAYQYPGYRGYQYVLERDRHSGEFCTYGELGTQAHTGQLQSIRRVQH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

View online »

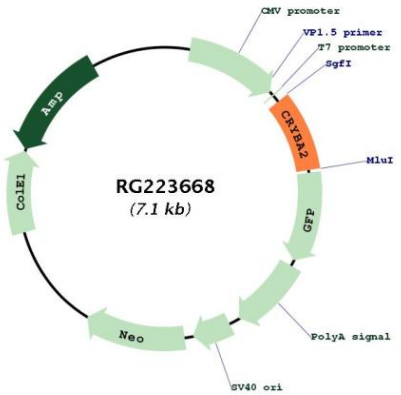
Cloning Scheme:



ACCN:	NM_057093
ORF Size:	591 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_057093.2
RefSeq Size:	903 bp
RefSeq ORF:	594 bp
Locus ID:	1412
UniProt ID:	P53672
Cytogenetics:	2q35

Gene Summary: Crystallins are separated into two classes: taxon-specific, or enzyme, and ubiquitous. The latter class constitutes the major proteins of the vertebrate eye, which function to maintain 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 defined 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 but absent in the acidic group). Beta-crystallins form aggregates of different sizes and are able to form homodimers through self-association or heterodimers with other beta-crystallins. This gene is a beta acidic group member. Three alternatively spliced transcript variants encoding identical proteins have been reported. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG223668