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Product datasheet for RG207718

beta B1 Crystallin (CRYBB1) (NM_001887) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	beta B1 Crystallin (CRYBB1) (NM_001887) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	beta B1 Crystallin
Synonyms:	CATCN3; CTRCT17
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG207718 representing NM_001887
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTCAGGCTGCAAAGGCCTCGGCCTCGGCCACAGTGGCGGTGAACCCAGGGCCTGACACCAAGGGGA
AGGGGGCCCCACCTGCAGGAACATCCCCTAGTCCCGGCACTACCCTGGCCCCAACAACCGTGCCTATTAC
CAGCGCCAAGGCGGCGGAACTGCCTCCTGGGAACTACAGGCTGGTGGTCTTCGAACTGGAAAACTTCCAG
GGCCGTCGAGCAGAATTCTCGGGGGAGTGCTCAAATCTGGCAGACCGTGGCTTCGACCGTGTGCGCAGCA
TCATTGTCTCCGCGGGACCCTGGGTCGCCTTTGAGCAGTCCAACTTCCGCGGGGAGATGTTCATCCTGGA
GAAGGGCGAGTACCCTCGCTGGAACACATGGTCGAGCAGCTACCGCAGTGATCGGCTCATGTCCTTCCGG
CCCATCAAAATGGATGCCCAGGAGCACAAAATCTCCCTGTTTGAAGGGGCCAACTTCAAGGGCAACACCA
TAGAGATCCAGGGGGACGACGCACCCAGTCTCTGGGTCTACGGCTTCAGTGACCGCGTGGGCAGCGTGAA
GGTCTCCAGTGGAACATGGGTTGGCTATCAGTATCCTGGCTACCGCGGGTACCAGTACCTCCTAGAGCCT
GGTGACTTCCGGCACTGGAATGAGTGGGGAGCCTTCCAGCCACAGATGCAGTCCCTGCGTCGCCTGCGTG
ACAAGCAGTGGCACCTCGAGGGGTCCTTCCCTGTCCTGGCCACAGAGCCCCCCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

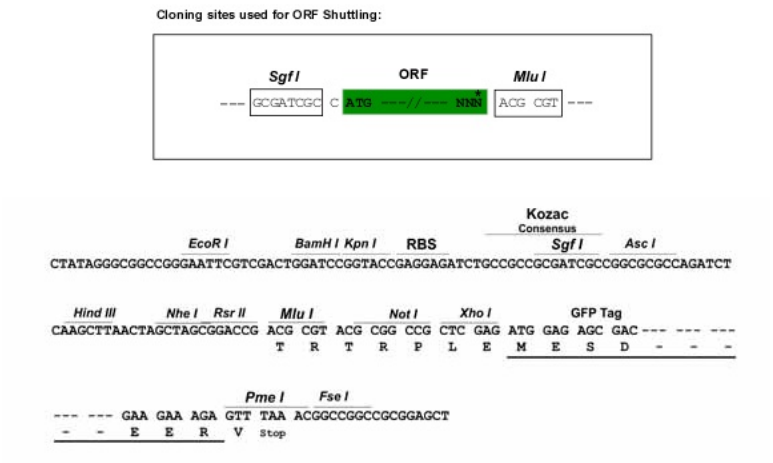
>RG207718 representing NM_001887
Red=Cloning site Green=Tags(s)

MSQAAKASASATVAVNPGPDTKGKGAPPAGTSPSPGTTLAPTTVPITSAKAAELPPGNYRLVVFELENFQ
GRRAEFSGECSNLADRGFDRVRSIIVSAGPWVAFEQSNFRGEMFILEKGEYPRWNTWSSSYRSDRLMSFR
PIKMDAQEHKISLFEGANFKGNTIEIQGDDAPSLWVYGFSDRVGSVKVSSGTWVGYQYPGYRGYQYLLEP
GDFRHWNEWGAFQPQMQSLRRLRDKQWHLEGSFPVLATEPPK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001887

ORF Size: 756 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001887.4
RefSeq Size:	921 bp
RefSeq ORF:	759 bp
Locus ID:	1414
UniProt ID:	P53674
Cytogenetics:	22q12.1
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, undergoes extensive cleavage at its N-terminal extension during lens maturation. It is also a member of a gene cluster with beta-A4, beta-B2, and beta-B3. [provided by RefSeq, Jul 2008]

Product images:

Circular map for RG207718