

Product datasheet for **RG205374**

mu Crystallin (CRYM) (NM_001014444) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	mu Crystallin
Synonyms:	DFNA40; THBP
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG205374 representing NM_001014444
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGAGCCGGGTACCAGCGTTCCTGAGCGCGGCCGAGGTGGAGGAACACCTCCGCAGCTCCAGCCTCCTCA
TCCCGCCTCTAGAGACGGCCCTGGCCAACTTCTCCAGCGGTCCGAAGGAGGGGTATGCAGCCCGTGCG
CACCGTGGTGCCGGTGACCAAGCACAGGGGCTACCTGGGGGTATGCCCGCCTACAGTGTGCAGAGGAT
GCACTGACCACCAAGTTGGTCACCTTCTACGAGGACCGCGCATCACCTCGTCCCTTCCCACCAGG
CTACTGTGCTACTCTTTGAGCCCAGCAATGGCACCCCTGCTGGCGGTATGGATGGAAATGTCATAACTGC
AAAGAGAACAGCTGCAGTTTCTGCCATTGCCACCAAGTTTCTGAAACCTCCAGCAGTGAAGTGTGTGC
ATCCTTGGGGCTGGGGTCCAGGCCTACAGCCATTATGAGATCTTCACAGAGCAGTTCTCCTTAAAGGAGG
TGAGGATATGGAACCGCACCAAGAAAATGCAGAGAAGTTTGCAGACACAGTGAAGGAGAGGTACGGGT
CTGTTCTTCGGTCCAGGAGGCTGTGGCAGGTGCAGATGTGATCATCACAGTCAACCCTGGCAACAGAGCCC
ATTTTGTGGTGAATGGGTGAAGCCAGGGGCTCACATCAATGCTGTTGGAGCCAGCAGACCTGACTGGA
GAGAACTGGATGATGAGCTCATGAAAGAAGCTGTGCTGTACGTGGATTCCAGGAGGCTGCCCTGAAGGA
GTCTGGAGATGCTCTGTGTAGGGGCCGAGATCTTTGCTGAGCTGGGAGAAGTGATTAAGGGAGTGAAA
CCAGCCCACTGTGAGAAGACCACGGTGTTCAGTCTTTGGGAATGGCAGTGGAAGACACAGTTGCAGCCA
AACTCATCTATGATTCTGTGTCATCTGGTAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG205374 representing NM_001014444
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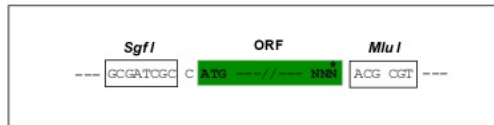
MSRVP AFLSAAEVEEHLRSSLLIPLETALANFSSGPEGVMQPVRTVVPVTKHRGYLGVPAYSAAED
ALTTKLVTIFYEDRGITSVVP SHQATVLLFEP SNGTLLAVMDGNVITAKRTAAVSAIATKFLKPPSSEVLC
ILGAGVQAYSHYEIFTEQFSFKEVRIWNRTKENAEKFADTVQGEVRVCSSVQEAVAGADV IITVTLATEP
ILFGEWVKPGAHINAVGASRPDWRELDDELMKEAVLYVDSQEAALKESGDVLLSGAEIFAELGEVIKGVK
PAHCEKTTVFKSLGMAVEDTVAAKLIYDSWSSGK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCGCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGCTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGCGCGGAGCT

- - E E R V Stop

ACCN: NM_001014444

ORF Size: 942 bp

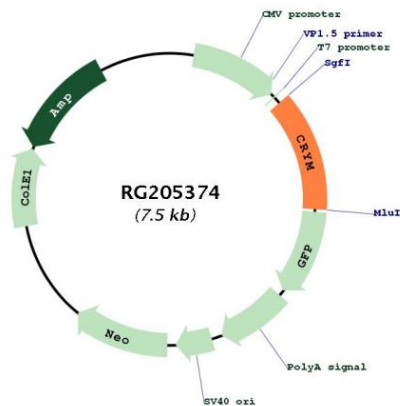
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<u>NM_001014444.1</u> , <u>NP_001014444.1</u>
RefSeq Size:	1255 bp
RefSeq ORF:	819 bp
Locus ID:	1428
Cytogenetics:	16p12.2
Gene Summary:	Crystallins are separated into two classes: taxon-specific and ubiquitous. The former class is also called phylogenetically-restricted crystallins. The latter class constitutes the major proteins of vertebrate eye lens and maintains the transparency and refractive index of the lens. This gene encodes a taxon-specific crystallin protein that binds NADPH and has sequence similarity to bacterial ornithine cyclodeaminases. The encoded protein does not perform a structural role in lens tissue, and instead it binds thyroid hormone for possible regulatory or developmental roles. Mutations in this gene have been associated with autosomal dominant non-syndromic deafness. [provided by RefSeq, Sep 2014]

Product images:



Circular map for RG205374