

## Product datasheet for **RC205374**

### mu Crystallin (CRYM) (NM\_001014444) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** mu Crystallin (CRYM) (NM\_001014444) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** mu Crystallin  
**Synonyms:** DFNA40; THBP  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC205374 representing NM\_001014444  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAGCCCGTGCACCCGTGGTGCCGGTGACCAAGCACAGGGGCTACCTGGGGTCATGCCCGCTACA  
GTGCTGCAGAGGATGCACTGACCACCAAGTTGGTCACCTTCTACGAGGACCGGGCATCACCTCGGTCGT  
CCCTTCCCACAGGCTACTGTGCTACTTTGAGCCCAGCAATGGCACCCCTGCTGGCGGTATGGATGGA  
AATGTCATAACTGCAAAGAGAACAGCTGCAGTTTCTGCCATTGCCACCAAGTTTCTGAAACCTCCCAGCA  
GTGAAGTGTGTGCATCCTTGGGGTGGGGTCCAGGCCTACAGCCATTATGAGATCTTCACAGAGCAGTT  
CTCCTTTAAGGAGGTGAGGATATGGAACCGCACCAAGAAAATGCAGAGAAGTTTGCAGACACAGTGCAA  
GGAGAGGTACGGGTCTGTTCTTCGGTCCAGGAGGCTGTGGCAGGTGCAGATGTGATCATCACAGTACCC  
TGGCAACAGAGCCATTTTGGTTGGTGAATGGGTGAAGCCAGGGGCTCACATCAATGCTGTTGGAGCCAG  
CAGACCTGACTGGAGAGAACTGGATGATGAGCTCATGAAAGAAGCTGTGCTGTACGTGGATTCCCAGGAG  
GCTGCCCTGAAGGAGTCTGGAGATGTCTGTGTCAGGGGCCGAGATCTTTGCTGAGCTGGGAGAAGTGA  
TTAAGGGAGTGAACAGCCACTGTGAGAAGACCACCGTGTCAAGTCTTTGGGAATGGCAGTGGGAAGA  
CACAGTTGCAGCCAACTCATCTATGATTCCTGGTCATCTGGTAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC205374 representing NM\_001014444  
Red=Cloning site Green=Tags(s)

MQPVRTVVPVTKHRGYLGVPAYSAAEDALTTKLVTFFYEDRGITSVVPSHQATVLLFEPSNGTLLAVMDG  
 NVITAKRTAAVSAIATKFLKPPSSEVLCILGAGVQAYSHYEIFTEQFSFKEVRIWNRTKENAEKFADTVQ  
 GEVRCSSVQEAVAGADVITVTLATEPILFGEWVKPGAHINAVGASRPDWRELDDELMKEAVLYVDSQE  
 AALKESGDVLLSGAEIFAELGEVIKGVKPAHCEKTTVFKSLGMAVEDTVAAKLIYDSWSSGK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1508\\_d06.zip](https://cdn.origene.com/chromatograms/ja1508_d06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001014444

**ORF Size:** 816 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\\_001014444.2](#), [NP\\_001014444.1](#)

**RefSeq Size:** 1255 bp

**RefSeq ORF:** 819 bp

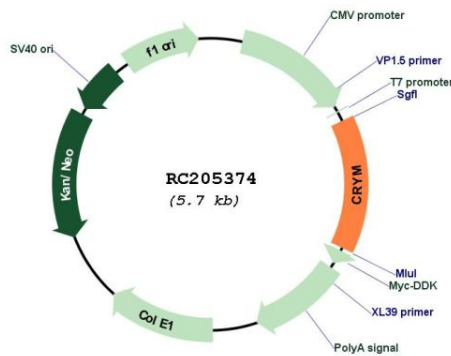
**Locus ID:** 1428

**Cytogenetics:** 16p12.2

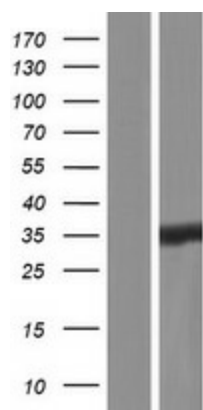
**MW:** 29.2 kDa

**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 RC205374



Western blot validation of overexpression lysate (Cat# [LY423067]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205374 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).