

Product datasheet for SC301942

OriGene Technologies, Inc.

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mu Crystallin (CRYM) (NM_001014444) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: mu Crystallin (CRYM) (NM 001014444) Human Untagged Clone

Tag: Tag Free Symbol: CRYM

Synonyms: DFNA40; THBP

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC301942 representing NM_001014444.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGCAGCCCGTGCGCACCGTGGTGCCGGTGACCAAGCACAGGGGCTACCTGGGGGTCATGCCCGCCTAC
AGTGCTGCAGAGGATGCACTGACCACCAAGTTGGTCACCTTCTACGAGGACCGCGGCATCACCTCGGTC
GTCCCTTCCCACCAGGCTACTGTGCTACTCTTTGAGCCCAGCAATGGCACCCTGGTGGCGGTCATGGAT
GGAAATGTCATAACTGCAAAGAGAACAGCTGCAGTTTCTGCCATTGCCACCAAGTTTCTGAAACCTCCC
AGCAGTGAAGTGCTGTGCATCCTTGGGGCTGGGGTCCAGGCCTACAGCCATTATGAGATCTTCACAGAG
CAGTTCTCCTTTAAGGAGGTGAGGATATGGAACCGCACCAAAGAAAATGCAGAGAAGTTTGCAGACACA
GTGCAAGGAGAGGTACGGGTCTGTTCTTCGGTCCAGGAGGCTGTGGCAGGTGCAGATGTGATCATCACA
GTCACCCTGGCAACAGAGCCCATTTTGTTTGGTGAATGGGTGAAGCCAGGGGCTCACATCAATGCTGTT
GGAGCCAGCAGACCTGACTGGAGAGAACTGGATGATGACCTCATGAAAGAAGCTGTGCTGTACCTGGAT
TCCCAGGAGGCTGCCCTGAAGGAGTCTGGAGATGTCCTGCTGTCAGGGGCCGAGATCTTTGCTGAGCTG
GGAGAAGTGATTAAGGGAGTGAAACCAGCCCACTGTGAGAAAGACCACCGTGTTCAAGTCTTTGGGAATG

GCAGTGGAAGACACAGTTGCAGCCAAACTCATCTATGATTCCTGGTCATCTGGTAAA<mark>TAA</mark>
ACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

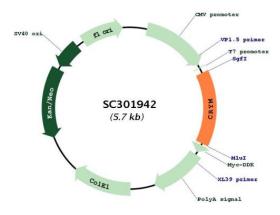
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul





Plasmid Map:



ACCN: NM_001014444

Insert Size: 819 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: <u>NM 001014444.2</u>

RefSeq Size: 1232 bp



mu Crystallin (CRYM) (NM_001014444) Human Untagged Clone - SC301942

 RefSeq ORF:
 819 bp

 Locus ID:
 1428

 Cytogenetics:
 16p12.2

 MW:
 29.4 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]

Transcript Variant: This variant (2) differs in the 5' UTR and lacks an in-frame portion of the 5' coding region, compared to variant 1. The resulting isoform (2) has a shorter N-terminus,

compared to isoform 1.