

Product datasheet for **RG225403**

CRYZ (NM_001130043) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CRYZ (NM_001130043) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CRYZ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG225403 representing NM_001130043 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGACTGGACAGAAGTTGATGAGAGCTGTTAGAGTTTTTGAATTTGGTGGGCCAGAAGTCCTGAAAT
 TGCGATCAGATATTGCAGTACCGATTCCAAAAGACCATCAGGTTCTAATCAAGGTCCATGCATGTGGTGT
 CAACCCCGTGGAGACATACATTGCTCTGGTACTTATAGTAGAAAACCACTCTTACCCTATACTCCTGGC
 TCAGATGTGGCTGGGGTGATAGAAGCTGTTGGAGATAATGCATCTGCTTTCAAGAAAGGTGACAGAGTTT
 TCACTAGCAGCACGATCTCTGGGGTTATGCAGAGTATGCTCTTGCAGCAGACCACACTGTTTACAAACT
 ACCTGAAAACTGGACTTTAAACAAGGAGCTGCCATCGGCATTCCATATTTTACTGCTTATCGAGCTCTG
 ATCCACAGTGCCTGTGTGAAAGCTGGAGAGAGTGTCTGGTTCATGGGGCAAGTGAGGAGTTGGATTAG
 CAGCATGCCAAATTGCTAGAGCTTATGGCTTAAAGATTTTGGGCACTGCTGGTACTGAGGAAGGACAAAA
 GATTGTTTTGCAAAATGGAGCCCATGAAGTGTTCAATCACAGAGAAGTAATTACATTGATAAAATTAAG
 GTTGTGGCAGCAGAGGTACTATTGAAATAAACCCACGAGACACCATGGCAAAGGAGTCGAGTATAATTG
 GAGTTACTCTCTTTCTCAACCAAGGAGGAATTCAGCAATATGCAGCAGCCCTTCAAGCTGGAATGGA
 AATTGGCTGGTTGAAACCTGTGATAGTTCTCAATATCCATTGGAGAAGGTGGCCGAGGCTCATGAAAT
 ATCATTATGGTAGTGGGCTACTGAAAAATGATTCTTCTCTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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Protein Sequence: >RG225403 representing NM_001130043
 Red=Cloning site Green=Tags(s)

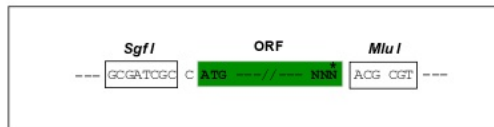
MATGQKLMRAVRVFEFGGPEVLKLRSDIAVPIKDHQVLIKVHACGVNPVETYIRSGTYSRKPLLPTPG
 SDVAGVIEAVGDNASAFKKGDRVFTSSTISGGYAEYALAADHTVYKLPEKLDKQGAIGIPYFTAYRAL
 IHSACVKAGESVLVHGASGGVGLAACQIARAYGLKILGTAGTEEGQKIVLQNGAHEVFNHREVNYIDKIK
 VVGSRGITIEINPRDTMAKESSIIGVTLFSSSTKEEFQQYAAALQAGMEIGWLKPVIGSQYPLEKVAEAHEN
 IIHGSGATGKMILL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



CTATAGGGCGGCGGGAATTCGCTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCGCCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGTAGCTAGCGGACCG 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 ACGGCCGGCCGGAGCT

- - E E R V Stop

PmeI FseI

ACCN: NM_001130043

ORF Size: 885 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_001130043.1](#), [NP_001123515.1](#)

RefSeq Size: 2176 bp

RefSeq ORF: 888 bp

Locus ID: 1429

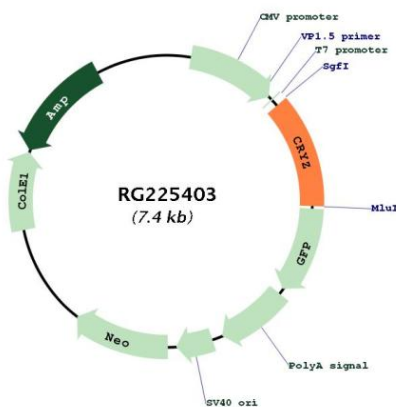
UniProt ID: [Q08257](#)

Cytogenetics: 1p31.1

Protein Families: Druggable Genome

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. The former class is also called phylogenetically-restricted crystallins. This gene encodes a taxon-specific crystallin protein which has NADPH-dependent quinone reductase activity distinct from other known quinone reductases. It lacks alcohol dehydrogenase activity although by similarity it is considered a member of the zinc-containing alcohol dehydrogenase family. Unlike other mammalian species, in humans, lens expression is low. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. One pseudogene is known to exist. [provided by RefSeq, Sep 2008]

Product images:



Circular map for RG225403