

## **Product datasheet for MG201482**

## Cryaa (BC092385) Mouse Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Cryaa (BC092385) Mouse Tagged ORF Clone

Tag: TurboGFP

Symbol: Cryaa

Synonyms: Acry-1; Crya-1; Crya-1; DAcry-1; lop18

Mammalian Cell

Selection:

Neomycin

**Vector:** pCMV6-AC-GFP (PS100010)

**E. coli Selection:** Ampicillin (100 ug/mL)

ORF Nucleotide >MG201482 representing BC092385

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGACGTCACCATTCAGCATCCTTGGTTCAAGCGTGCCCTGGGGCCCTTCTACCCCAGCCGACTGTTCG
ACCAGTTCTTCGGCGAGGGCCTTTTTGAGTACGACCTGCTGCCCTTCCTGTCTTCCACCATCAGCCCCTA
CTACCGCCAGTCCCTCTTCCGCACTGTGCTGGACTCGGGCATCTCTGAGGTCCGATCTGACCGGGACAAG
TTTGTCATCTTCTTGGACGTGAAGCACTTCTCTCCTGAGGACCTCACCGTGAAGGTACTGGAGGATTTTG
TGGAGATTCACGGCAAACACAACGAGAGGCAGGATGACCATGGCTACATTTCCCGTGAATTTCACCGTCG
CTACCGTCTGCCTTCCAATGTGGACCAGTCCGCCCTCTCCTGCTCCCTGTCTGCGGATGGCATGCTGACC
TTCTCTGGCCCCAAGGTCCAGTCCGGTTTGGATGCTGCCACAGCGAGAGGGCCATTCCTGTGTCACGGG

AGGAGAAACCCAGCTCTGCACCCTCGTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG201482 representing BC092385

Red=Cloning site Green=Tags(s)

MDVTIQHPWFKRALGPFYPSRLFDQFFGEGLFEYDLLPFLSSTISPYYRQSLFRTVLDSGISEVRSDRDK FVIFLDVKHFSPEDLTVKVLEDFVEIHGKHNERQDDHGYISREFHRRYRLPSNVDQSALSCSLSADGMLT

FSGPKVQSGLDAGHSERAIPVSREEKPSSAPSS

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-Mlul



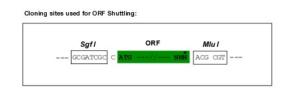
**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

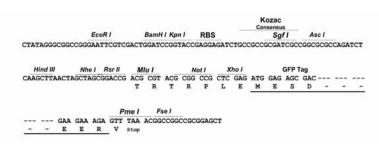
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

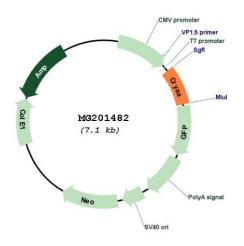


## **Cloning Scheme:**





## Plasmid Map:



**ACCN:** BC092385 **ORF Size:** 521 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: BC092385, AAH92385

RefSeq Size: 1112 bp RefSeq ORF: 521 bp Locus ID: 12954

Cytogenetics: 17 17.09 cM

**Gene Summary:** This gene encodes subunit a, one of two subunits of alpha-crystallin, which is a high

> molecular weight, soluble aggregate and is a member of the small heat shock protein (sHSP) family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. It acts as a molecular chaperone and is the major protein in the eye lens, maintaining the transparency and refractive index of the lens. In mouse, deficiency in this gene is associated with smaller lenses and eyes and with

increasing lens opacity with age. Alternative splicing results in multiple transcript variants.

[provided by RefSeq, Jan 2014]