

Product datasheet for MR228276

Cryaa (NM 001278570) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cryaa (NM_001278570) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Cryaa

Synonyms: Acry; Acry-1; Cry; Crya; Crya-1; Crya1; DAcry; DAcry-1; lop18

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>MR228276 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGACGTCACCATTCAGCATCCTTGGTTCAAGCGTGCCCTGGGGCCCTTCTACCCCAGCCGACTGTTCG
ACCAGTTCTTCGGCGAGGGCCTTTTTGAGTACGACCTGCTGCCCTTCCTGTCTTCCACCATCAGCCCCTA
CTACCGCCAGTCCCTCTTCCGCACTGTGCTGGACTCGGGCATCTCTGAGGTCCGATCTGACCGGGACAAG
TTTGTCATCTTCTTGGACGTGAAGCACTTCTCTCCTGAGGACCTCACCGTGAAGGTACTGGAGGATTTTG
TGGAGATTCACGGCAAACACAACGAGAGGCAGGATGACCATGGCTACATTTCCCGTGAATTTCACCGTCG
CTACCGTCTGCCTTCCAATGTGGACCAGTCCGCCCTCTCCTGCTCCTGTCTGCGGATGGCATGCTGACC
TTCTCTGGCCCCAAGGTCCAGTCCGGTTTGGATGCTGGCCACAGCGAGAGGGCCATTCCTGTTCACGGG
AGGAGAAACCCAGCTCTGCACCCTCGTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR228276 protein sequence

Red=Cloning site Green=Tags(s)

MDVTIQHPWFKRALGPFYPSRLFDQFFGEGLFEYDLLPFLSSTISPYYRQSLFRTVLDSGISEVRSDRDK FVIFLDVKHFSPEDLTVKVLEDFVEIHGKHNERQDDHGYISREFHRRYRLPSNVDQSALSCSLSADGMLT

FSGPKVQSGLDAGHSERAIPVSREEKPSSAPSS

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Restriction Sites: Sgfl-Mlul



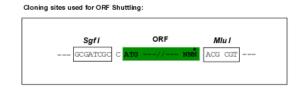
OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

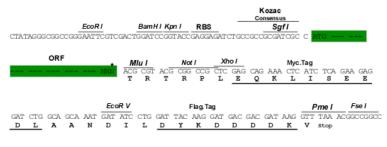
CN: techsupport@origene.cn

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



Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001278570

ORF Size: 522 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: <u>NM 001278570.1</u>, <u>NP 001265499.1</u>

RefSeq Size: 1127 bp
RefSeq ORF: 522 bp
Locus ID: 12954

Cytogenetics: 17 17.09 cM

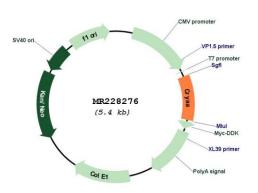
MW: 19.8 kDa



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]

Product images:



Circular map for MR228276