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Product datasheet for MR228293

Cryab (NM_001289785) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cryab (NM_001289785) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cryab
Synonyms:	Cry; Crya; Crya-2; Crya2; Hsp; HspB5; P23
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR228293 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACATCGCCATCCACCACCCCTGGATCCGGCGCCCCTTCTTCCCCTTCCACTCCCCAAGCCGCCTCT
TCGACCAGTTCTTCGGAGAGCACCTGTTGGAGTCTGACCTCTTCTCAACAGCCACTTCCCTGAGCCCCTT
CTACCTTCGGCCACCCTCCTTCCTGCGGGCACCCAGCTGGATTGACACCGGACTCTCAGAGATGCGTTTG
GAGAAGGACAGATTCTCTGTGAATCTGGACGTGAAGCACTTCTCTCCGGAGGAACTCAAAGTCAAGGTTC
TGGGGGACGTGATTGAGGTCCACGGCAAGCACGAAGAACGCCAGGACGAACATGGCTTCATCTCCAGGGA
GTTCCACAGGAAGTACCGGATCCCAGCCGATGTGGATCCTCTCACCATCACTTCATCCCTGTCATCTGAT
GGAGTCCTCACTGTGAATGGACCAAGGAAACAGGTGTCTGGCCCTGAGCGCACCATTCCCATCACCCGTG
AAGAGAAGCCTGCTGTCGCCGCAGCCCCTAAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR228293 protein sequence
Red=Cloning site Green=Tags(s)

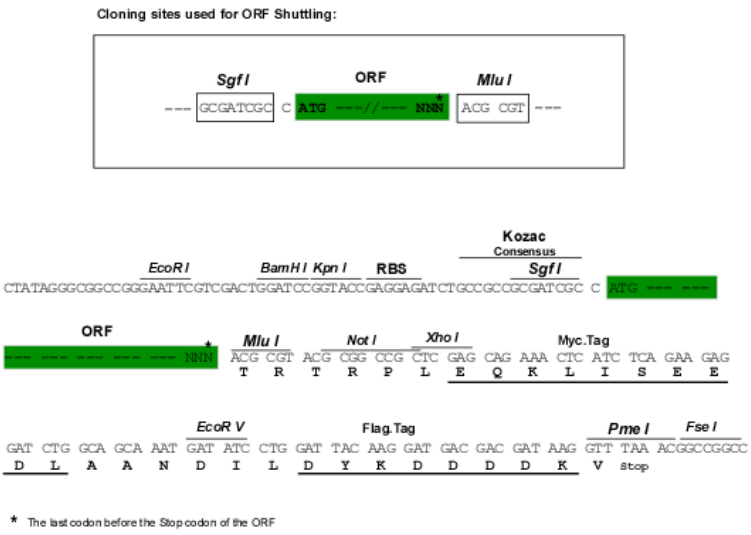
MDIAIHHPWIRRPFFPFHSPSRLFDQFFGEHLLESDLFSTATSLSPFYLRPPSFLRAPSWIDTGLSEMRL
EKDRFSVNLDVKHFSPEELKVKVLGDVIEVHGKHEERQDEHGFISREFHRKYRIPADVDPLTITSSLSSD
GVLTVNGPRKQVSGPERTIPITREEKPAVAAAPKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_001289785

ORF Size: 528 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_001289785.1, NP_001276714.1

RefSeq Size: 874 bp

RefSeq ORF: 528 bp

Locus ID: 12955

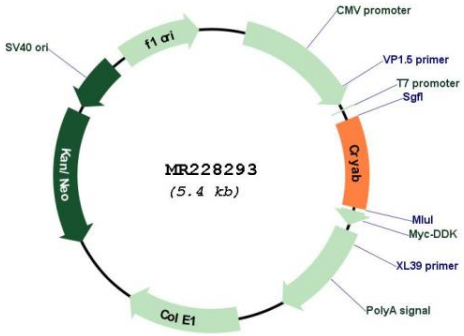
UniProt ID: P23927

Cytogenetics: 9 27.75 cM

MW: 20.1 kDa

Gene Summary: This gene encodes a member of the small heat-shock protein (HSP20) family. The encoded protein is a molecular chaperone that protects proteins against thermal denaturation and other stresses. This protein is a component of the eye lens, regulates lens differentiation and functions as a refractive element in the lens. This protein is a negative regulator of inflammation, has anti-apoptotic properties and also plays a role in the formation of muscular tissue. Mice lacking this gene exhibit worse experimental autoimmune encephalomyelitis and inflammation of the central nervous system compared to the wild type. In mouse models, this gene has a critical role in alleviating the pathology of the neurodegenerative Alexander disease. Mutations in the human gene are associated with myofibrillar myopathy 2, fatal infantile hypertonic myofibrillar myopathy, multiple types of cataract and dilated cardiomyopathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

Product images:



Circular map for MR228293