

## Product datasheet for **RR213783**

### Cryab (NM\_012935) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cryab (NM\_012935) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Cryab  
**Synonyms:** AACRYA  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RR213783 representing NM\_012935  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACATAGCCATCCACCACCCTGGATCCGGCGTCCCTTCTTTCCCTTCCACTCCCCAAGCCGCCTCT  
TTGACCAGTTCTTCGGAGAGCACCTGTTGGAGTCTGACCTCTTCTCTACAGCCACTTCCCTGAGCCCTT  
CTACCTTCGGCCACCCTCCTTCTGCGGGCACCTAGCTGGATTGACACTGGGCTCTCAGAGATGCGTATG  
GAGAAGGACAGGTTCTCTGTGAACCTGGACGTGAAGCACTTCTCTCCAGAGGAACCAAAGTCAAGGTTCT  
TGGGAGACGTGATTGAGGTGCACGGCAAGCACGAAGAGCGCCAGGACGAACATGGCTTCATCTCCAGGGA  
GTTCCACAGGAAGTACCGGATCCCAGCCGACGTGGATCCTCTCACCATTACTTCTCCCTGTCATCGGAT  
GGAGTCTCACTGTGAATGGACCAAGGAAACAGGCCTCTGGCCCTGAGCGCACCATTCCCATCACCCGTG  
AAGAGAAGCCTGCTGCTCACTGCAGCCCCAAGAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR213783 representing NM\_012935  
Red=Cloning site Green=Tags(s)

MDIAIHPWIRPPFFPFHSPSRLFDQFFGEHLLESDFSTATSLSPFYLRPPSFLRAPSWIDTGLSEMRM  
EKDRFSVNLVDVKHFSPEELKVKVLGDVIEVHGKHEERQDEHGFISREFHRKYRIPADVDPLTITSSLSDD  
GVLTVNGPRKQASGPRTIPITREEKPAVTAAPKK

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja3437\\_h09.zip](https://cdn.origene.com/chromatograms/ja3437_h09.zip)



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_012935

ORF Size: 525 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\\_012935.4](#), [NP\\_037067.1](#)

RefSeq Size: 1019 bp

RefSeq ORF: 528 bp

Locus ID: 25420

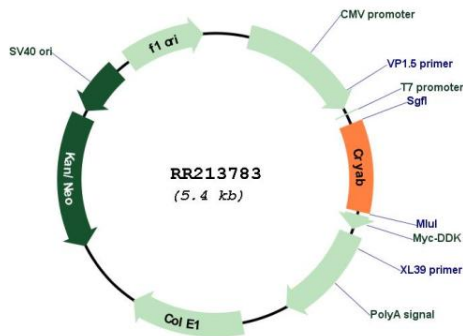
UniProt ID: [P23928](#)

**Cytogenetics:** 8q23

**MW:** 20.1 kDa

**Gene Summary:** This gene encodes subunit b, 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 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. Alternate promoter usage results in different transcript variants encoding the same protein. [provided by RefSeq, Sep 2014]

**Product images:**



Circular map for RR213783