

Product datasheet for RC202718L4V

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Alpha B Crystallin (CRYAB) (NM_001885) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Alpha B Crystallin (CRYAB) (NM_001885) Human Tagged ORF Clone Lentiviral Particle

Symbol: Alpha B Crystallin

Synonyms: CMD1II; CRYA2; CTPP2; CTRCT16; HEL-S-101; HSPB5; MFM2

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_001885

ORF Size: 525 bp

ORF Nucleotide

OTI Disclaimer:

The ORF insert of this clone is exactly the same as(RC202718).

Sequence:

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. <u>More info</u>

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeg: NM 001885.1

 RefSeq Size:
 998 bp

 RefSeq ORF:
 528 bp

 Locus ID:
 1410

 UniProt ID:
 P02511

 Cytogenetics:
 11q23.1

Domains: HSP20, crystallin

MW: 20.2 kDa





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Gene Summary:

Mammalian lens crystallins are divided into alpha, beta, and gamma families. Alpha crystallins are composed of two gene products: alpha-A and alpha-B, for acidic and basic, respectively. Alpha crystallins can be induced by heat shock and are members of the small heat shock protein (HSP20) family. They act as molecular chaperones although they do not renature proteins and release them in the fashion of a true chaperone; instead they hold them in large soluble aggregates. These heterogeneous aggregates consist of 30-40 subunits; the alpha-A and alpha-B subunits have a 3:1 ratio, respectively. Two additional functions of alpha crystallins are an autokinase activity and participation in the intracellular architecture. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Alpha-A and alpha-B gene products are differentially expressed; alpha-A is preferentially restricted to the lens and alpha-B is expressed widely in many tissues and organs. Elevated expression of alpha-B crystallin occurs in many neurological diseases; a missense mutation cosegregated in a family with a desmin-related myopathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2019]