

Product datasheet for SC201206

OriGene Technologies, Inc.

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Alpha B Crystallin (CRYAB) (NM_001885) Human 3' UTR Clone

Product data:

Product Type: 3' UTR Clones

Product Name: Alpha B Crystallin (CRYAB) (NM_001885) Human 3' UTR Clone

Symbol: Alpha B Crystallin

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

Mammalian Cell

Selection:

Neomycin

Vector: pMirTarget (PS100062)

ACCN: NM_001885

Insert Size: 230 bp

The sequence shown below is from the reference sequence of NM_001885. The complete

sequence of this clone may contain minor differences, such as SNPs.

Blue=Stop Codon Red=Cloning site

GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAGGCCAAGAAGGGCGGAAAGATCGCCGTG

TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC

CCTGCTGTCACCGCAGCCCCCAAGAAATAGATGCCCTTTCTTGAATTGCATTTTTTAAAACAAGAAAGT TTCCCCACCAGTGAATGAAAGTCTTGTGACTAGTGCTGAAGCTTATTAATGCTAAGGGCAGGCCCAAAT TATCAAGCTAATAAAATATCATTCAGCAACAGATAACTGTCTTGTGTTTGAATATTCCACACACTTTTA

AATAAATATACAGATACCACAGA

ACGCGTAAGCGGCCGCGCATCTAGATTCGAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA

CGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGG

Restriction Sites: Sgfl-Mlul

OTI Disclaimer: Our molecular clone sequence data has been matched to the sequence identifier above as a

point of reference. Note that the complete sequence of this clone is largely the same as the

reference sequence but may contain minor differences, e.g., single nucleotide

polymorphisms (SNPs).

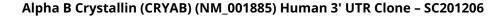
Components: The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The

package also includes 100 pmols of both the corresponding 5' and 3' vector primers in

separate vials.

RefSeq: <u>NM 001885.3</u>







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]

Locus ID: 1410

MW: 8.6