

Product datasheet for TP302718L

OriGene Technologies, Inc.

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Alpha B Crystallin (CRYAB) (NM_001885) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human crystallin, alpha B (CRYAB), 1 mg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC202718 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MDIAIHHPWIRRPFFPFHSPSRLFDQFFGEHLLESDLFPTSTSLSPFYLRPPSFLRAPSWFDTGLSEMRL EKDRFSVNLDVKHFSPEELKVKVLGDVIEVHGKHEERQDEHGFISREFHRKYRIPADVDPLTITSSLSSD

GVLTVNGPRKQVSGPERTIPITREEKPAVTAAPKK

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-Myc/DDK

Predicted MW: 20 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 001876

Locus ID: 1410

UniProt ID: <u>P02511</u>, <u>V9HW27</u>

RefSeq Size: 998





Cytogenetics: 11q23.1

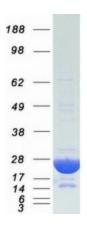
RefSeq ORF: 525

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

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]

Product images:



Coomassie blue staining of purified CRYAB protein (Cat# [TP302718]). The protein was produced from HEK293T cells transfected with CRYAB cDNA clone (Cat# [RC202718]) using MegaTran 2.0 (Cat# [TT210002]).