OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for PH302718

Alpha B Crystallin (CRYAB) (NM_001885) Human Mass Spec Standard

Product data:

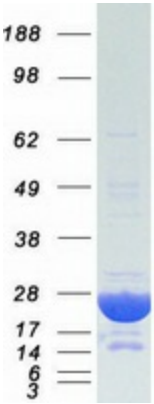
Product Type:	Mass Spec Standards
Description:	CRYAB MS Standard C13 and N15-labeled recombinant protein (NP_001876)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC202718
Predicted MW:	20.2 kDa
Protein Sequence:	>RC202718 protein sequence Red=Cloning site Green=Tags(s) MDIAIHHPWIRRPFFPFHSPSRLFDQFFGEHLLESDLFPTSTSLSPFYLRPPSFLRAPSWFDTGLSEMRL EKDRFSVNLDVKHFSPEELKVKVLGDVIEVHGKHEERQDEHGFISREFHRKYRIPADVDPLTITSSLSSD GVLTVNGPRKQVSGPERTIPITREEKPAVTAAPKK TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_001876
RefSeq Size:	998
RefSeq ORF:	525
Synonyms:	CMD1II; CRYA2; CTPP2; CTRCT16; HEL-S-101; HSPB5; MFM2
Locus ID:	1410
UniProt ID:	P02511, V9HW27

View online »

Cytogenetics: 11q23.1

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]).