



Rabbit Anti-Human CRYAB Polyclonal antibody (DPABH-00332)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Alpha B Crystallin fusion protein, sequence: MDIAIHHPWIRRPFFPFHSPSRLFDQFFGEHLLESDLFPTSTLSPFYLRPPSFLRAPSWFDTGLSEMRLEKDRFSVNLDVKHFSPEELKVKVLDVIEHGKHEERQDEHGFISREFHRYRIPADVDPLTITSSLSSDGVLTVNGPRKQVSGPERTIPITREEKPAVTAAPKK (1-175 aa encoded by BC007008)
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Purification	Antigen affinity purification
Conjugate	Unconjugated
Applications	WB, IP, IHC, IF, ELISA
Positive Control	human heart tissue, mouse heart tissue, mouse skeletal muscle tissue
Format	Liquid
Size	50 µl, 100 µl
Buffer	PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Preservative	0.02% Sodium Azide
Storage	Store at -20°C. Aliquoting is unnecessary for -20°C storage.

BACKGROUND

Introduction

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. Post-translational modifications decrease the ability to chaperone. 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.

Keywords

CRYAB; crystallin, alpha B; MFM2; CRYA2; CTPP2; HSPB5; CMD1II; CTRCT16; HEL-S-101; alpha-crystallin B chain; heat shock protein beta-5; rosenthal fiber component; heat-shock 20 kD like-protein; renal carcinoma antigen NY-REN-27; epididymis secretory protein Li 101;

GENE INFORMATION

Entrez Gene ID

[1410](#)

UniProt ID

[P02511](#)