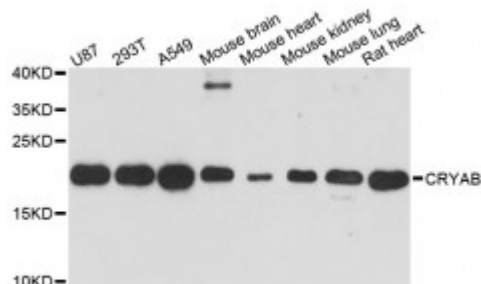


Anti-CRYAB Antibody



Description

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.

Model

STJ115651

Host

Rabbit

Reactivity

Human, Mouse, Rat

Applications

WB

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-175 of human CRYAB (NP_001876.1).

Gene ID	1410
Gene Symbol	CRYAB
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	Lens as well as other tissues
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Alpha-crystallin B chain Alpha(B -crystallin Heat shock protein beta-5 HspB5 Renal carcinoma antigen NY-REN-27 Rosenthal fiber component
Molecular Weight	20.159 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:2389OMIM:123590Reactome:R-HSA-3371571
Alternative Names	Alpha-crystallin B chain Alpha(B -crystallin Heat shock protein beta-5 HspB5 Renal carcinoma antigen NY-REN-27 Rosenthal fiber component
Function	May contribute to the transparency and refractive index of the lens, Has chaperone-like activity, preventing aggregation of various proteins under a wide range of stress conditions
Cellular Localization	Cytoplasm,