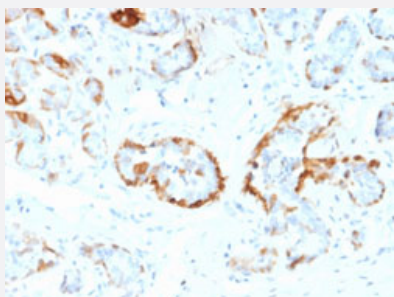


CRYAB monoclonal antibody, clone CPTC-CRYAB-1

Catalog # MAB20893 Size 100 ug

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human breast with CRYAB monoclonal antibody, clone CPTC-CRYAB-1 (Cat # MAB20893).

Specification

Product Description	Mouse monoclonal antibody raised against full length recombinant human CRYAB.
Immunogen	Recombinant protein corresponding to full length human CRYAB.
Host	Mouse
Reactivity	Human
Form	Liquid
Purification	Protein A/G purification
Isotype	IgG2c, kappa
Recommend Usage	Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (0.5-1 ug/mL) Western Blot (0.5-1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In 10 mM PBS (0.05% BSA, 0.05% sodium azide).
Storage Instruction	Store at 2 to 8°C.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot
- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human breast with CRYAB monoclonal antibody, clone CPTC-CRYAB-1 (Cat # MAB20893).

Gene Info — CRYAB

Entrez GeneID [1410](#)

Protein Accession# [P02511](#)

Gene Name CRYAB

Gene Alias CRYA2, CTPP2, HSPB5

Gene Description crystallin, alpha B

Omim ID [123590 608810](#)

Gene Ontology [Hyperlink](#)

Gene Summary

Crystallins are separated into two classes: taxon-specific, or enzyme, and ubiquitous. The latter class constitutes the major proteins of vertebrate eye lens and maintains the transparency and refractive index of the lens. Since lens central fiber cells lose their nuclei during development, these crystallins are made and then retained throughout life, making them extremely stable proteins. Mammalian lens crystallins are divided into alpha, beta, and gamma families; beta and gamma crystallins are also considered as a superfamily. Alpha and beta families are further divided into acidic and basic groups. Seven protein regions exist in crystallins: four homologous motifs, a connecting peptide, and N- and C-terminal extensions. 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 (sHSP also known as the 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. 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. [provided by RefSeq]

Other Designations

alpha crystallin B chain|heat-shock 20 kD like-protein

Disease

- [Alzheimer disease](#)
- [Cognition](#)
- [Genetic Predisposition to Disease](#)
- [Multiple Sclerosis](#)