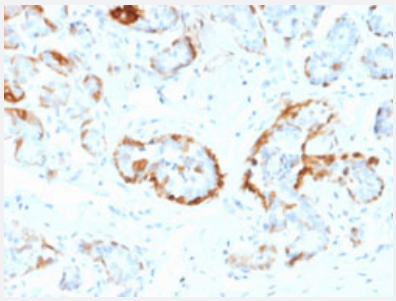
CRYAB monoclonal antibody, clone CPTC-CRYAB-1

Catalog # MAB20894 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 # MAB20894).

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.
Storage Instruction	Store at -20 to -80°C. Aliquot to avoid repeated freezing and thawing.

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 # MAB20894).

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 cl ass constitutes the major proteins of vertebrate eye lens and maintains the transparency and refra ctive index of the lens. Since lens central fiber cells lose their nuclei during development, these cry stallins are made and then retained throughout life, making them extremely stable proteins. Mam malian lens crystallins are divided into alpha, beta, and gamma families; beta and gamma crystall ins are also considered as a superfamily. Alpha and beta families are further divided into acidic a nd 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 functi ons 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 restricte d 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 f amily 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