



Category: Monoclonal Antibodies
Product Name: Mouse Monoclonal Antibody to CRYAB

Catalog Number: MAB-606020182

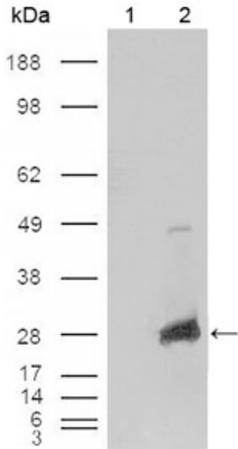


Figure 1: Western blot analysis using CRYAB mouse mAb against HEK293T cells transfected with the pCMV6-ENTRY control (1) and pCMV6-ENTRY CRYAB cDNA (2).

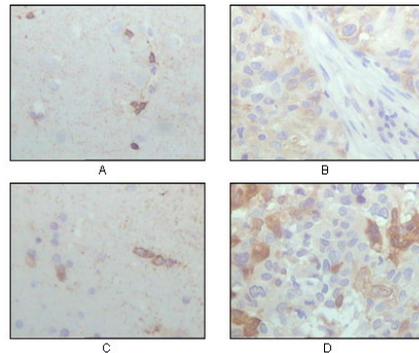


Figure 2: Immunohistochemical analysis of paraffin-embedded human brain hippocampus (A), lung cancer (B), brain tumor (C), breast cancer (D), showing cytoplasmic localization with DAB staining using CRYAB mouse mAb.

Lot#:
Clone#: 1D11C6E6
Host and isotype: Mouse IgG2a
Size: 0.1ml
MW:
Aliases: CRYA2; CTPP2; HSPB5; CRYAB
Entrez Gene: 1410
Species reactivity: Human

Description Crystallin, alpha B. 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.

Immunogen Purified recombinant fragment of CRYAB (aa1-175) expressed in E. Coli.

Application Western Blotting: 1/500 - 1/2000.
Immunohistochemistry: 1/200 - 1/1000.
ELISA: Propose dilution 1/10000.
Not yet tested in other applications.
Determining optimal working dilutions by titration test.

Formulation Ascitic fluid containing 0.03% sodium azide.

Storage Store at 4°C, for long term storage, store at -20°C.

Related product References 1. Cell. 2007 Aug 10;130(3):427-39.
2. Biochemistry. 2006 Nov 21;45(46):13847-54.
3. J Mol Biol. 2007 Sep 14;372(2):470-84.

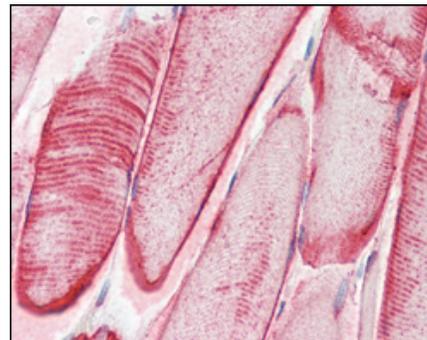


Figure 3: Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissues using CRYAB mouse mAb.

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