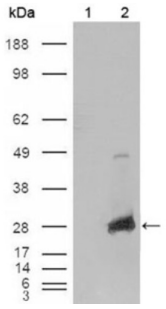
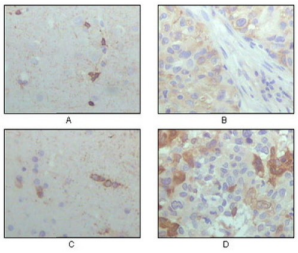
# Crystallin Alpha B (CRYAB) Antibody

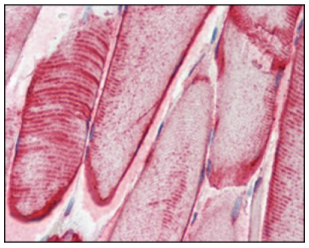
Catalogue No.:abx015733




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




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



Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissues using CRYAB antibody.



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.

**Target:** Crystallin Alpha B (CRYAB)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|---|---|
| **Clonality:** | Monoclonal |
| **Reactivity:** | Human |
| **Tested Applications:** | ELISA, IHC |
| **Host:** | Mouse |
| **Recommended dilutions:** | ELISA: 1/10000, IHC: 1/200 - 1/1000. Optimal dilutions/concentrations should be determined by the end user. |
| **Conjugation:** | Unconjugated |
| **Immunogen:** | Purified recombinant fragment of CRYAB (aa1-175) expressed in E. coli. |
| **Isotype:** | $IgG_{2a}$ |
| **Form:** | Liquid |
| **Purification:** | Unpurified ascites. |
| **Storage:** | Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles. |
| **GeneID:** | 1410 12955 25420 281719 100519789 |
| **Buffer:** | Ascitic fluid containing 0.03% sodium azide. |
| **Concentration:** | Not determined. |
| **Note:** | THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION. |




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