

Mouse Anti-Alpha B-crystallin/CRYAB [CPTC-CRYAB-1]: MC0425, MC0425RTU7

Intended Use: For Research Use Only

Description: Crystallins are the major proteins of the vertebrate eye lens, where they maintain the transparency and refractive index of the lens. Crystallins are divided into α , β and γ families, and the β - and γ -crystallins also compose a superfamily. Crystallins usually contain seven distinct protein regions, including four homologous motifs, a connecting peptide, and N- and C-terminal extensions. Alpha-crystallins consist of three gene products, αA -, αB - and αC -crystallin, which are members of the small heat shock protein family (HSP 20). Alpha-crystallins act as molecular chaperones by holding denatured proteins in large soluble aggregates. However, unlike other molecular chaperones, α -crystallins do not renature these proteins. Expression of αA -crystallin is restricted to the lens and defects of this gene cause the development of autosomal dominant congenital cataracts (ADCC). The human αB -crystallin gene product is expressed in many tissues, including lens, heart and skeletal muscle. Elevated expression of αB -crystallin is associated with many neurological diseases, and a missense mutation in this gene has co-segregated in a family with a Desmin-related myopathy.

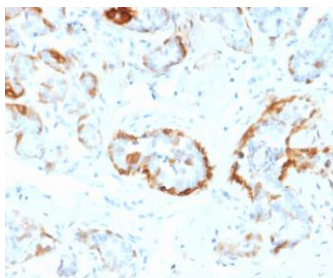
Specifications:

Clone: CPTC-CRYAB-1
 Source: Mouse
 Isotype: IgG2c/k
 Reactivity: Human, rat
 Immunogen: Recombinant human full-length CRYAB protein
 Localization: Cytoplasm, translocates to nucleus during heat shock and resides in nuclear splicing speckles
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, WB
 Package:

Description	Catalog No.	Size
Alpha B-crystallin/CRYAB Concentrated	MC0425	1 ml
Alpha B-crystallin/CRYAB Prediluted	MC0425RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Heart, brain, 293T whole cell lysates
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human breast stained with anti-CRYAB using DAB

References:

1. Abnormal degradation of the neuronal stress-protective transcription factor HSF1 in Huntington's disease. Rocio Gomez-Pastor, et al. Nat Commun. Feb 13;8:14405, 2017.
2. Telkoparan P, et al. Coiled-coil domain containing protein 124 is a novel centrosome and midbody protein that interacts with the Ras-guanine nucleotide exchange factor 1B and is involved in cytokinesis. Telkoparan P, et al. PLoS One 8:e69289, 2013.

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Rev. A