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Anti-Alpha-crystallin B (pS59) Antibody

Rabbit polyclonal antibody to Alpha-crystallin B (pS59)
Catalog # AP61161

Product Information

Application	WB, IHC
Primary Accession	P02511
Reactivity	Human, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20159

Additional Information

Gene ID	1410
Other Names	CRYA2; Alpha-crystallin B chain; Alpha(B)-crystallin; Heat shock protein beta-5; HspB5; Renal carcinoma antigen NY-REN-27; Rosenthal fiber component
Target/Specificity	Recognizes endogenous levels of Alpha-crystallin B (pS59) protein.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/50 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/50 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

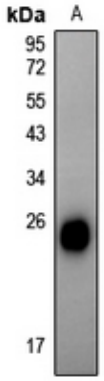
Name	CRYAB (HGNC:2389)
Synonyms	CRYA2, HSPB5
Function	May contribute to the transparency and refractive index of the lens. Has chaperone-like activity, preventing aggregation of various proteins under a wide range of stress conditions. In lens epithelial cells, stabilizes the ATP6V1A protein, preventing its degradation by the proteasome (By similarity).
Cellular Location	Cytoplasm. Nucleus Secreted. Lysosome {ECO:0000250|UniProtKB:P23927}. Note=Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles (PubMed:19464326). Localizes at the Z- bands and the intercalated disk in cardiomyocytes (PubMed:28493373) Can be secreted; the secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC

	(endoplasmic reticulum- Golgi intermediate compartment) followed by vesicle entry and secretion (PubMed:32272059).
Tissue Location	Lens as well as other tissues (PubMed:2387586, PubMed:838078). Expressed in myocardial tissue (PubMed:28493373)

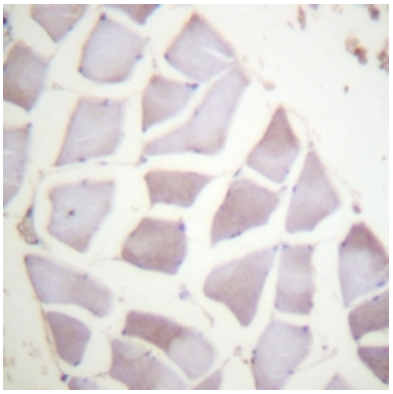
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Alpha-crystallin B (pS59). The exact sequence is proprietary.

Images



Western blot analysis of Alpha-crystallin B (pS59) expression in rat heart (A) whole cell lysates.



Immunohistochemical analysis of Alpha-crystallin B (pS59) staining in human skeletal muscle formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.