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Anti-Alpha-crystallin B (Phospho-S19) Antibody

Catalog # AP51643

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P02511
Reactivity	Human, Mouse, Rat, Pig, Bovine, Sheep, Mk
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	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S19 of human Alpha-crystallin B protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

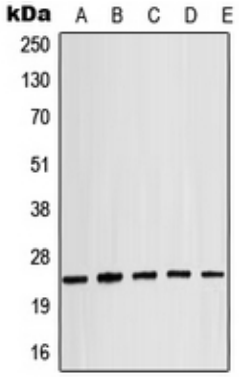
Name	CRYAB (HGNC:2389)
Synonyms	CRYA2, HSPB5
Function	May contribute to the transparency and refractive index of the lens. Has chaperone-like activity, preventing aggregation of various proteins under a wide range of stress conditions. In lens epithelial cells, stabilizes the ATP6V1A protein, preventing 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)

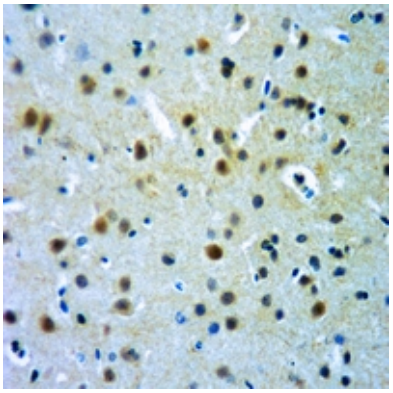
References

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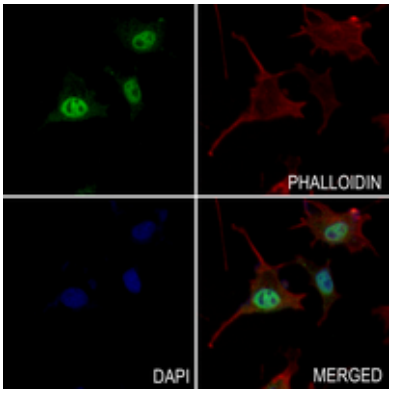
Images



Western blot analysis of Alpha-crystallin B (Phospho-S19) expression in MCF7 (A), mouse spleen (B), mouse eye (C), rat liver (D), rat eye (E) whole cell lysates. (Predicted band size: 20 kD; Observed band size: 24 kD)



Immunohistochemical analysis of Alpha-crystallin B (Phospho-S19) staining in rat brain 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.



Immunofluorescent analysis of Alpha-crystallin B (Phospho-S19) staining in LOVO cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.