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Crystallin-αB (phospho Ser45) rabbit pAb

Cat No.:ES4831

For research use only

Overview

Product Name	Crystallin-αB (phospho Ser45) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat;Monkey
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human CRYAB around the phosphorylation site of Ser45. AA range:21-70
Specificity	Phospho-Crystallin-αB (S45) Polyclonal Antibody detects endogenous levels of Crystallin-αB protein only when phosphorylated at S45.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Alpha-crystallin B chain
Gene Name	CRYAB
Cellular localization	Cytoplasm . Nucleus . Secreted . Lysosome . 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 ca
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	24kD
Human Gene ID	1410
Human Swiss-Prot Number	P02511
Alternative Names	CRYAB; CRYA2; Alpha-crystallin B chain;

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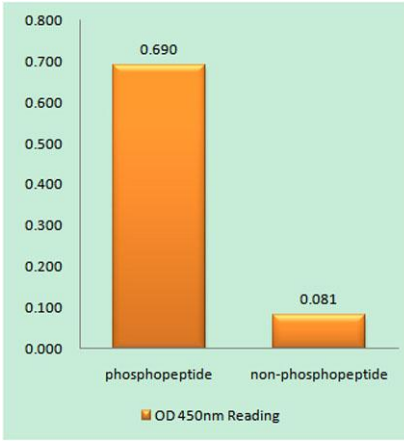
Alpha(B)-crystallin; Heat shock protein beta-5; HspB5; Renal carcinoma antigen NY-REN-27; Rosenthal fiber component

Background

Mammalian lens crystallins are divided into alpha, beta, and gamma families. 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 (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. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distin



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CRYAB (Phospho-Ser45) Antibody

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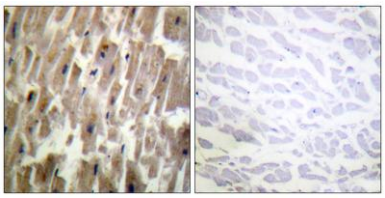
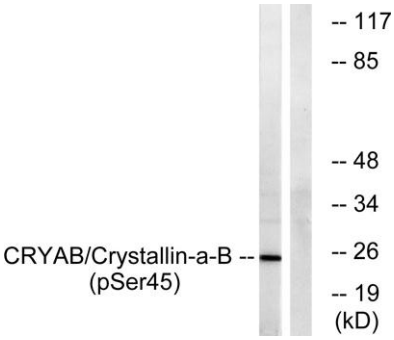
Immunohistochemistry analysis of paraffin-embedded human heart, using CRYAB (Phospho-Ser45) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from COS7 cells treated with anisomycin 25ug/ml 30', using CRYAB (Phospho-Ser45) Antibody. The lane on the right is blocked with the phospho peptide.



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