



# Crystallin- $\alpha$ B (phospho Ser59) rabbit pAb

Cat No.:ES4832

For research use only

## Overview

Product Name	Crystallin- $\alpha$ B (phospho Ser59) rabbit pAb
Host species	Rabbit
Applications	IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human CRYAB/Crystallin-alpha-B around the phosphorylation site of Ser59. AA range:31-80
Specificity	Phospho-Crystallin- $\alpha$ B (S59) Polyclonal Antibody detects endogenous levels of Crystallin- $\alpha$ B protein only when phosphorylated at S59.
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	
Human Gene ID	1410
Human Swiss-Prot Number	P02511
Alternative Names	CRYAB; CRYA2; Alpha-crystallin B chain;





## Background

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

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 distinct

Immunohistochemistry analysis of paraffin-embedded human skeletal muscle, using CRYAB/Crystallin-alpha-B (Phospho-Ser59) Antibody. The picture on the right is blocked with the phospho peptide.

