Datasheet for ABIN2481832

anti-CRYAB antibody (PE)

4 Images

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Overview

Quantity:	200 µg
Target:	CRYAB
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CRYAB antibody is conjugated to PE
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	Native Alpha B Crystallin
Clone:	3A10-C9
Isotype:	IgG1
Specificity:	Detects ~20 kDa (predicted mol.weight is ~21 kDa). Does not cross-react with αA-crystallin, βL-crystallin, BH-crystallin, γ-crystallin, HSP25, HSP27 or HSP47 proteins.
Cross-Reactivity:	Cow, Human, Rat
Purification:	Protein G Purified

Target Details

Target:	CRYAB

Target Details

Alternative Name:	Alpha B Crystallin (CRYAB Products)
Background:	The alpha-crystallins are major water-soluble lens structural proteins of the vertebrate eye that are related to the small heat shock protein family. The alpha-crystallins possess structural and functional similarities with HSP25 and HSP27 (1). Mammalian lens cystallins are divided into alpha, beta and gamma families. Alpha and beta families are further divided into acidic and basic groups (Alpha-A and Alpha-B respectively). In the lens, alpha-crystallin primarily functions to maintain proper refractive index, however it can also function as a molecular chaperone that binds to the denatured proteins, keeping them in solution and thereby maintaining the translucency of the lens. When cellular stress occurs, alpha-crystallin enters its' phosphorylated state and may serve a structural control function and play a role in protein maintenance (2). In addition to their interaction with proteins, alpha-crystallins also interact with native molecules such as membrane proteins, Golgi matrix protein, structural proteins, nuclear proteins and DNA (3, 4, 5, 6, and 7). Two other functions are an autokinase activity and participation in the intracellular architecture, and it has also been proven that both alpha-A and B prevent apoptosis by inhibiting caspases (8). Specifically, alpha-B cystallin is found in many cells and organs outside the lens, and alpha B is overexpressed in several neurological disorders and in cell lines under stress conditions (9).
Gene ID:	1410
NCBI Accession:	NP_001876
UniProt:	P02511

Application Details

Application Notes:	• WB (1:2000) • ICC/IF (1:100) • optimal dilutions for assays should be determined by the user.
Comment:	0.5 µg/ml of ABIN2481832 was sufficient for detection of 50 ng purified alpha B crystalline by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

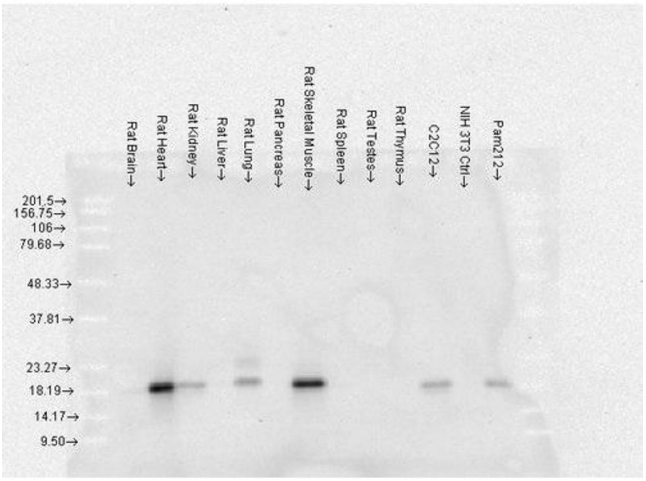
Handling

Format:	Liquid
Concentration:	1 mg/mL

Handling

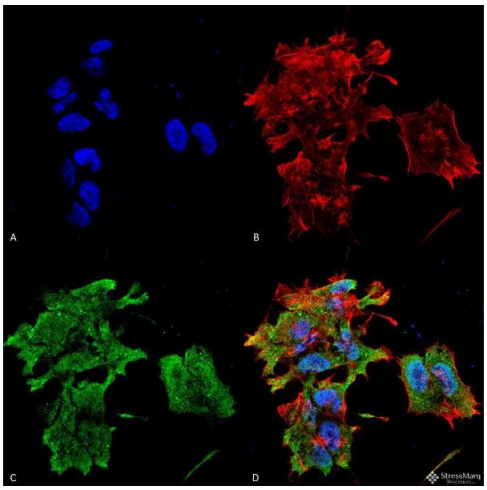
Buffer:	PBS pH 7.2, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



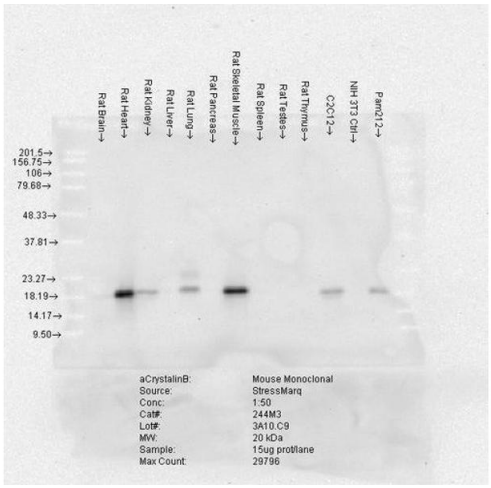
Western Blotting

Image 1. Western Blot analysis of Rat Brain, Heart, Kidney, Liver, Pancreas, Skeletal muscle, Spleen, Testes, Thymus cell lysates showing detection of Alpha B Crystallin protein using Mouse Anti-Alpha B Crystallin Monoclonal Antibody, Clone 3A10.C9 (ABIN2481832). Load: 15 µg. Block: 1.5 % BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Alpha B Crystallin Monoclonal Antibody (ABIN2481832) at 1:50 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



Immunofluorescence (fixed cells)

Image 2. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Alpha B Crystallin Monoclonal Antibody, Clone 3A10.H4 . Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Alpha B Crystallin Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Alpha B Crystallin Antibody (D) Composite.



Western Blotting

Image 3. Western Blot analysis of Rat Brain, Heart, Kidney, Liver, Pancreas, Skeletal muscle, Spleen, Testes, Thymus cell lysates showing detection of Alpha B Crystallin protein using Mouse Anti-Alpha B Crystallin Monoclonal Antibody, Clone 3A10-C9 . Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Alpha B Crystallin Monoclonal Antibody at 1:50 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

Please check the product details page for more images. Overall 4 images are available for ABIN2481832.