abcam

Product datasheet

Anti-Alpha B Crystallin antibody ab13497

4 Abreviews 19 References 5 Images

Overview

Product name	Anti-Alpha B Crystallin antibody
Description	Rabbit polyclonal to Alpha B Crystallin
Host species	Rabbit
Specificity	Does not cross-react with αA-crystallin.
Tested applications	**Suitable for:** IP, WB, ICC, IHC-Fr, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Chicken, Cow, Human, Pig **Predicted to work with:** Rabbit, Hamster
Immunogen	Synthetic peptide: REEKPAVTAAPKK conjugated to KLH, corresponding to amino acids 163-175 of Human alpha B Crystallin. Run BLAST with Run BLAST with
Positive control	ICC: HeLa. (Heat shocked). WB: A431, HCT116, HeLa, HepG2, HEK293, HUVEC, Jurkat, MCF7, PC3 , and Rat brain cell lysate.
General notes	For maximum product recovery, after thawing, centrifuge the product vial before removing cap The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Constituent: Whole serum
Purity	Affinity purified
Clonality	Polyclonal

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab13497 in the following tested applications.

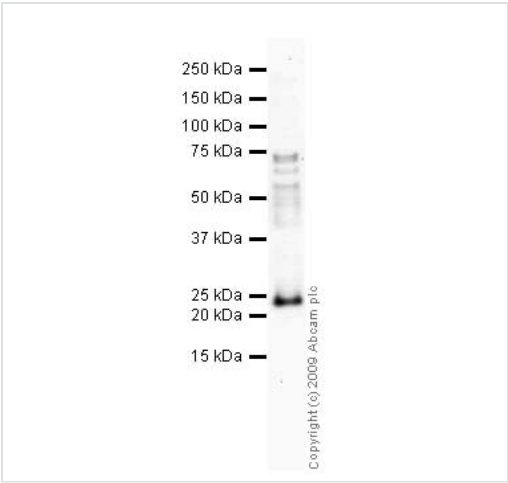
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
WB	★★★★★ (3)	1/1000 - 1/2000. Detects a band of approximately 22 kDa (predicted molecular weight: 20 kDa).
ICC		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
IHC-P	★★★★☆ (1)	Use at an assay dependent concentration.
ICC/IF		1/120.

Target

Function	May contribute to the transparency and refractive index of the lens.
Tissue specificity	Lens as well as other tissues.
Involvement in disease	Defects in CRYAB are the cause of myofibrillar alpha-B crystallin-related (MFM-CRYAB) [MIM:608810]. A neuromuscular disorder that results in weakness of the proximal and distal limb muscles, weakness of the neck, velopharynx and trunk muscles, hypetrophic cardiomyopathy, and cataract in a subset of patients.
Sequence similarities	Belongs to the small heat shock protein (HSP20) family.
Cellular localization	Cytoplasm. Nucleus. Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles.

Images



Western blot - Anti-Alpha B Crystallin antibody (ab13497)

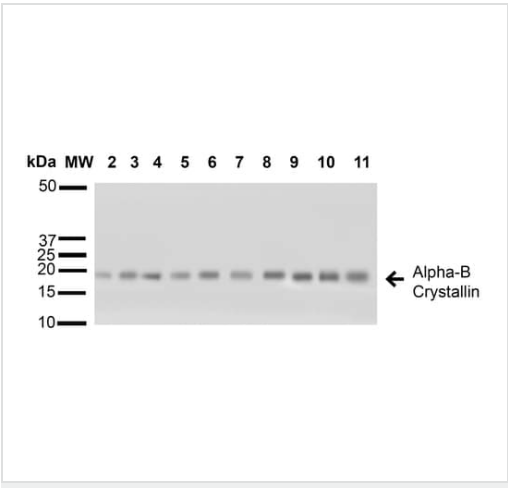
Anti-Alpha B Crystallin antibody (ab13497) at 1/1000 dilution + Human spinal cord tissue lysate - total protein (**ab29188**) at 10 µg

Secondary

Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Predicted band size: 20 kDa

Observed band size: 22 kDa



Western blot - Anti-Alpha B Crystallin antibody (ab13497)

Western blot analysis of Human A431, HCT116, HeLa, HepG2, HEK293, HUVEC, Jurkat, MCF7, PC3 and T98G cell lysates showing detection of ~22 kDa Alpha B Crystallin protein using Rabbit Anti-Alpha B Crystallin Polyclonal Antibody (ab13497).

Lane 1: Molecular Weight Ladder (MW).

Lane 2: A431 cell lysates.

Lane 3: HCT116 cell lysates.

Lane 4: HeLa cell lysates.

Lane 5: HepG2 cell lysates.

Lane 6: HEK293 cell lysates.

Lane 7: HUVEC cell lysates.

Lane 8: Jurkat cell lysates.

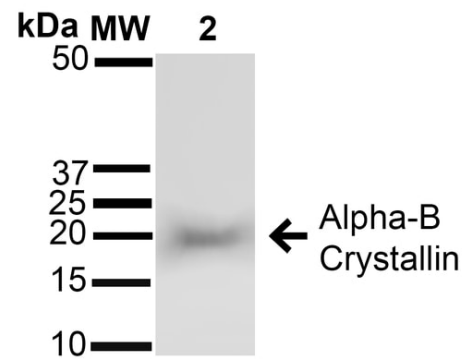
Lane 9: MCF7 cell lysates.

Lane 10: PC3 cell lysates.

Lane 11: T98G cell lysates.

Load: 15 µg. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Rabbit Anti-Alpha B Crystallin Polyclonal Antibody (ab13497) at

1/1000 dilution for 60 min at RT. Secondary Antibody: Goat Anti-Rabbit IgG: HRP at 1/1000 dilution for 60 min at RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~22 kDa.



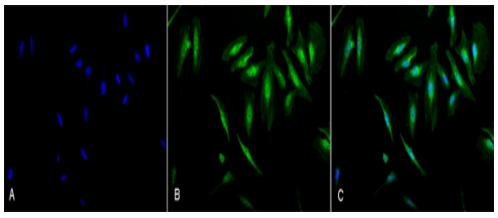
Western blot - Anti-Alpha B Crystallin antibody (ab13497)

Western blot analysis of Rat Brain cell lysates showing detection of ~22 kDa Alpha B Crystallin protein using Rabbit Anti-Alpha B Crystallin Polyclonal Antibody (ab13497).

Lane 1: Molecular Weight Ladder (MW).

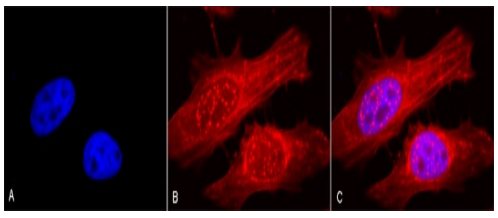
Lane 2: Rat Brain cell lysates.

Load: 15 µg. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Rabbit Anti-Alpha B Crystallin Polyclonal Antibody (ab13497) at 1/1000 dilution for 60 min at RT. Secondary Antibody: Goat Anti-Rabbit IgG: HRP at 1/1000 dilution for 60 min at RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~22 kDa.



Immunocytochemistry/ Immunofluorescence - Anti-Alpha B Crystallin antibody (ab13497)

Immunofluorescent analysis of 2% paraformaldehyde fixed Heat Shocked (at 42°C for 1h) Cervical cancer cell line (HeLa) for 20min at RT, labelling Alpha B Crystallin with ab13497 at 1/120 dilution for 12 hours at 4°C, followed by secondary antibody Goat Anti-Rabbit (FITC) (Green) at 1/200 dilution for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1/40000 dilution for 2 hours at RT. Image showing actin filament bundles, nuclear splicing speckles, and Exosome staining. (A) DAPI (blue) nuclear stain. (B) Anti-Alpha B Crystallin Antibody (green). (C) Composite image.



Immunocytochemistry/ Immunofluorescence - Anti-Alpha B Crystallin antibody (ab13497)

Immunofluorescent analysis of 2% paraformaldehyde fixed Heat Shocked (at 42°C for 1h) Cervical cancer cell line (HeLa) for 20min at RT, labelling Alpha B Crystallin with ab13497 at 1/120 dilution for 12 hours at 4°C, followed by secondary antibody Goat Anti-Rabbit (APC) (Red) at 1/200 dilution for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1/40000 dilution for 2 hours at RT. Image showing actin filament bundles, nuclear splicing speckles, and Exosome staining. (A) DAPI (blue) nuclear stain. (B) Anti-Alpha B Crystallin Antibody (Red). (C) Composite image.

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