


Product datasheet

Anti-Alpha B Crystallin antibody [1B6.1-3G4] ab13496

★★★★★ [5 Abreviews](#) [55 References](#) [3 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-Alpha B Crystallin antibody [1B6.1-3G4] |
| Description | Mouse monoclonal [1B6.1-3G4] to Alpha B Crystallin |
| Host species | Mouse |
| Tested applications | Suitable for: WB, Flow Cyt, IHC-P |
| Species reactivity | Reacts with: Cow, Human Predicted to work with: Mouse, Rat, Chicken  |
| Immunogen | Full length native protein (purified) corresponding to Cow Alpha B Crystallin. Database link: P02510 |
| Positive control | Recombinant Bovine alpha B Crystallin Protein. |
| General notes | <p>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.</p> <p>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</p> |

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. |
| Storage buffer | pH: 7.2 Preservative: 0.09% Sodium azide Constituents: 49.91% PBS, 50% Glycerol (glycerin, glycerine) |
| Purity | Protein G purified |
| Clonality | Monoclonal |
| Clone number | 1B6.1-3G4 |
| Isotype | IgG1 |

Applications

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab13496 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 |
|-------------|-----------|--|
| WB | ★★★★★ (1) | Use at an assay dependent concentration. Detects a band of approximately 20 kDa (predicted molecular weight: 21 kDa). |
| Flow Cyt | | Use at an assay dependent concentration. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |
| IHC-P | ★★★★★ (1) | Use at an assay dependent concentration. |

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, hypertrophic cardiomyopathy, and cataract in a subset of patients.

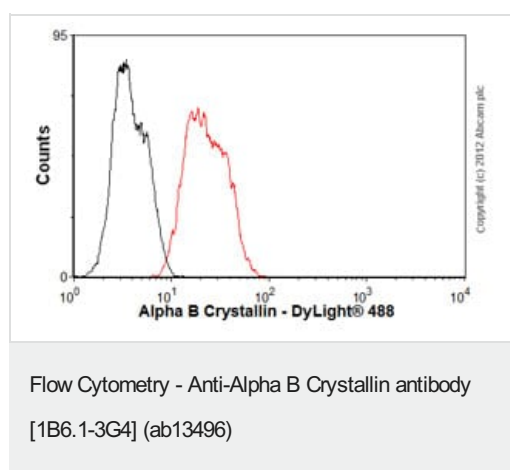
Sequence similarities

Belongs to the small heat shock protein (HSP20) family.

Cellular localization

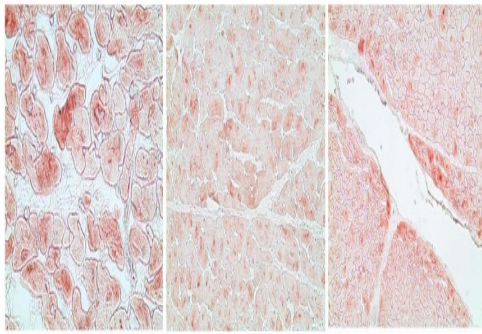
Cytoplasm. Nucleus. Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles.

Images



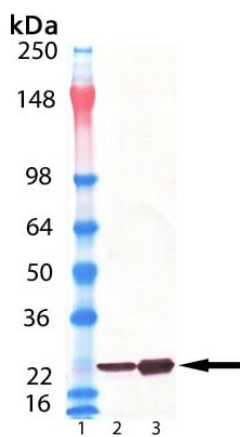
Overlay histogram showing SH-SY5Y cells stained with ab13496 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab13496, 1 µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2 µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in SH-SY5Y cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

This image was generated using the ascites version of the product.



Immunohistochemistry (paraffin sections) analysis of Human heart tissue labelling Alpha B Crystallin with ab13496 at 20 µg/mL

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Alpha B Crystallin antibody [1B6.1-3G4] (ab13496)



All lanes : Anti-Alpha B Crystallin antibody [1B6.1-3G4] (ab13496) at 1/1000 dilution

Lane 2 : a-Crystallin (bovine), (native)

Lane 3 : aB-Crystallin (bovine), (native)

Predicted band size: 21 kDa

Observed band size: 20 kDa

Western blot - Anti-Alpha B Crystallin antibody [1B6.1-3G4] (ab13496)

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