

Datasheet: VMA00548

Description:	MOUSE ANTI ALPHA B CRYSTALLIN
Specificity:	ALPHA B CRYSTALLIN
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	CPTC16
Isotype:	IgG2a
Quantity:	100 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse, Rat

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Mouse monoclonal antibody purified by affinity chromatography on Protein G from tissue culture supernatant.

Buffer Solution

Phosphate buffered saline.

Preservative Stabilisers

0.09% Sodium Azide (NaN₃).

Immunogen Recombinant protein of human alpha B crystallin

External Database

Links

UniProt:

[P02511](#) [Related reagents](#)

Entrez Gene:

[1410](#) CRYAB [Related reagents](#)

Synonyms

CRYA2

Specificity

Mouse anti Human alpha B crystallin antibody recognizes the alpha-crystallin B chain, also known as epididymis secretory protein Li 101, heat shock protein beta-5, CRYAB or heat-shock 20 kDa like-protein.

Crystallins are separated into two classes: taxon-specific, or enzyme, and ubiquitous. The latter class constitutes the major proteins of vertebrate eye lens and maintains the transparency and refractive index of the lens. Since lens central fiber cells lose their nuclei during development, these crystallins are made and then retained throughout life, making them extremely stable proteins. Mammalian lens crystallins are divided into alpha, beta, and gamma families; beta and gamma crystallins are also considered as a superfamily. Alpha and beta families are further divided into acidic and basic groups. Seven protein regions exist in crystallins: four homologous motifs, a connecting peptide, and N- and C-terminal extensions. 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 (sHSP also known as the 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. Alpha-A and alpha-B gene products are differentially expressed; alpha-A is preferentially restricted to the lens and alpha-B is expressed widely in many tissues and organs. Elevated expression of alpha-B crystallin occurs in many neurological diseases; a missense mutation cosegregated in a family with a desmin-related myopathy (provided by RefSeq, Jul 2008).

Mouse anti Human alpha B crystallin antibody detects a band of 22 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting

Anti alpha B crystallin detects a band of approximately 22 kDa in HeLa cell lysates.

Storage

Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Guarantee

12 months from date of despatch.

Acknowledgements

PrecisionAb is a trademark of Bio-Rad Laboratories.

Health And Safety Information Material Safety Datasheet documentation #10040 available at:
Antibody (10040): <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only.

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M398924:220627'

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