

## Datasheet: VMA00425

<b>Description:</b>	MOUSE ANTI ALPHA B CRYSTALLIN
<b>Specificity:</b>	ALPHA B CRYSTALLIN
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb™ Monoclonal
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

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

**PrecisionAb antibodies have been extensively [validated for the western blot application](#).** The antibody has been validated at the suggested dilution. 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 dependant on sample type.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Mouse monoclonal antibody purified by affinity chromatography on Protein G from ascites
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Immunogen</b>	Purified recombinant fragment of alpha B crystallin (aa1-175) expressed in <i>E.coli</i>
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P02511</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">1410</a> CRYAB   <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CRYA2
<b>Specificity</b>	<b>Mouse anti Human alpha B crystallin antibody</b> recognizes alpha B crystallin, also known as heat shock protein beta-5, heat-shock 20 kD like-protein and renal carcinoma antigen NY-REN-27, rosenthal fiber component.

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 formation of 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 chain antibody detects a band of 22 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

<b>Western Blotting</b>	Anti alpha B crystallin detects a band of approximately 22 kDa in human heart tissue
<b>Instructions For Use</b>	Please refer to the <a href="#">PrecisionAb western blotting protocol</a> . For additional information on secondary antibody dilution and exposure time see product web page.
<b>Storage</b>	Store undiluted at -20°C, avoiding repeated freeze thaw cycles.
<b>Guarantee</b>	As supplied, 12 months from date of despatch
<b>Acknowledgements</b>	PrecisionAb™ is a trademark of Bio-Rad Laboratories.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: Antibody (10040): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
<b>Regulatory</b>	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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