# Human/Mouse/Rat AlphaB Crystallin/CRYAB Alexa Fluor® 700-conjugated Antibody

Monoclonal Mouse $IgG_{2B}$ Clone # 731502

Catalog Number: FAB4849N

100 µg

## DESCRIPTION

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| **Species Reactivity** | Human/Mouse/Rat |
| **Specificity** | Detects human AlphaB Crystallin/CRYAB in direct ELISAs and human, mouse, and rat AlphaB Crystallin/CRYAB in Western blots. In direct ELISAs, no cross-reactivity with recombinant human AlphaA Crystallin/CRYAA is observed. |
| **Source** | Monoclonal Mouse $IgG_{2B}$ Clone # 731502 |
| **Purification** | Protein A or G purified from hybridoma culture supernatant |
| **Immunogen** | *E. coli*-derived recombinant human Crystallin/CRYAB<br>Met1-Lys175<br>Accession # P02511 |
| **Conjugate** | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm |
| **Formulation** | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

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| **Western Blot** | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

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| **Shipping** | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| **Stability & Storage** | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied |

## BACKGROUND

CRY-alpha B (crystalline α-B chain/CRYAB; also HspB5) is a 22-23 kDa member of the HSP20 family of proteins. It has widespread expression, and is found in lens epithelium where it noncovalently oligomerizes with CRYAA to generate a transparent 350-1000 kDa α-crystalline protein complex. Human CRYAB is 175 amino acids (aa) in length. It contains an α-crystalline Hsp domain over aa 66-149. Multiple post-translational modifications may exist. The N-terminal Met and MetAspIleAlaIleHis sequence is occasionally cleaved. It may also be phosphorylated at Ser45 and 59, be potentially O-GlcNAc modified at Thr158, 162 or 170, and acetylated at Lys92. An alternate start site at Met68 may be accompanied by a 47 aa substitution for aa 109-175. Full-length human CRYAB shares 54% aa sequence identity with CRYAA, and 98% aa identity with mouse CRYAB.

## PRODUCT SPECIFIC NOTICES

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Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475