

DESCRIPTION

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	<i>E. coli</i> -derived recombinant human Crystallin/CRYAB Met1-Lys175 Accession # P02511
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

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

PREPARATION AND STORAGE

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 MetAspIleAlaHis 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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