

DESCRIPTION

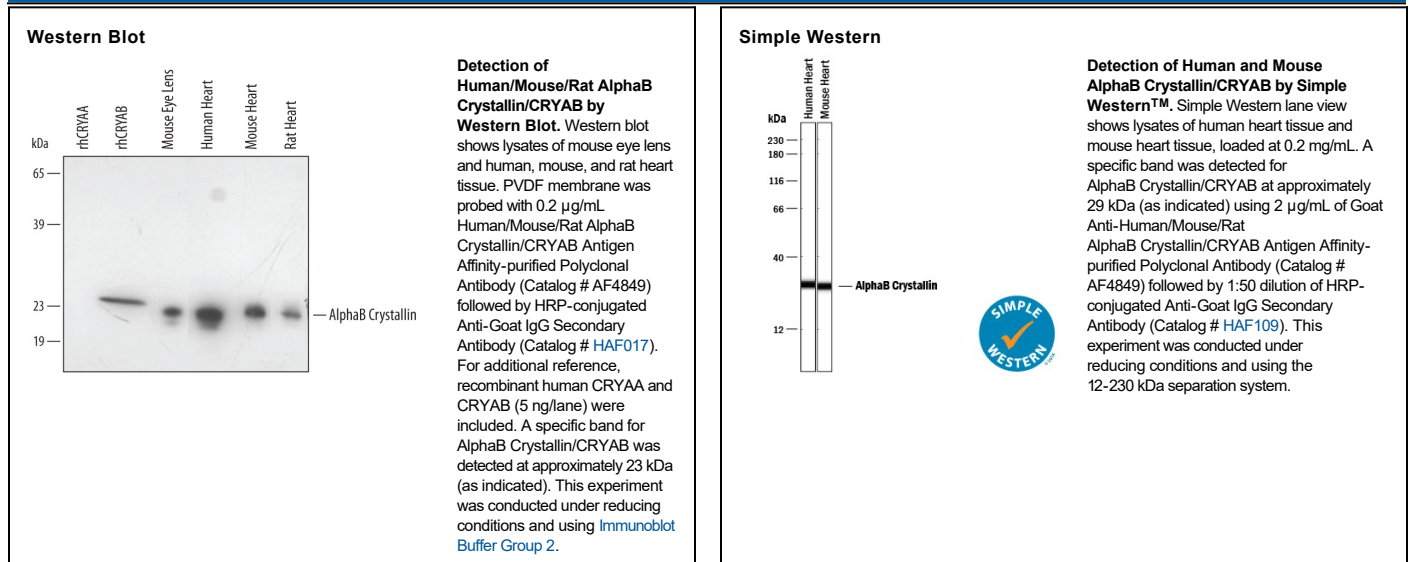
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat AlphaB Crystallin/CRYAB in Western blots. In Western blots, less than 1% cross-reactivity with recombinant human CRYAA is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human AlphaB Crystallin/CRYAB Met1-Lys175 Accession # P02511
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	0.2 µg/mL	See Below
Simple Western	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

AlphaB Crystallin (CRYAB, also known as Crystallin α-B chain and HspB5) is a 22-23 kDa member of the HSP20 family of proteins. It has widespread expression in many tissues in addition to lens epithelium, where it noncovalently oligomerizes with CRY-αA to generate a transparent 350-1000 kDa α-Crystallin protein complex. Human CRYAB is 175 amino acids (aa) in length. There is a α-Crystallin Hsp domain over aa 66-149. Multiple posttranslational modifications may exist. The N-terminal Met and MetAspIleAlaIleHis sequence is occasionally cleaved. There is also phosphorylation at Ser45 and 59, potential O-GlcNAc modification at Thr158, 162 or 170, and acetylation at Lys92. There is an alternate start site at Met68 that may be accompanied by a 47 aa substitution for aa 109-175. Full-length human CRYAB is 54% aa identical to CRY-AlphaA, and 98% aa identical to mouse CRYAB.