

Human/Mouse AlphaA Crystallin/CRYAA Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF4848

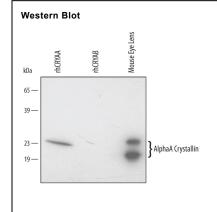
DESCRIPTION		
Species Reactivity	Human/Mouse	
Specificity	Detects mouse AlphaA Crystallin/CRYAA in Western blots. In Western blots, less than 1% cross-reactivity with recombinant human CRYAB is observed.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	E. coli-derived recombinant human AlphaA Crystallin/CRYAA Met1-Ser173 Accession # P02489	
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

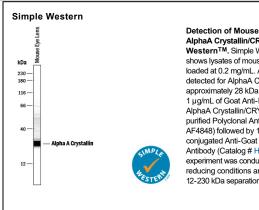
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 μg/mL	See Below
Simple Western	1 μg/mL	See Below





Detection of Human/Mouse AlphaA Crystallin/CRYAA by Western Blot. Western blot shows lysates of mouse eye lens tissue. PVDF membrane was probed with 0.1 µg/mL Goat Anti-Human/Mouse AlphaA Crystallin/CRYAA Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4848) followed by HRPconjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). For additional reference, recombinant human CRYAA and CRYAB (5 ng/lane) were included. Bands for AlphaA Crystallin/CRYAA were detected at approximately 20 - 23 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.



Detection of Mouse
AlphaA Crystallin/CRYAA by Simple
Western™. Simple Western lane view
shows lysates of mouse eye lens tissue,
loaded at 0.2 mg/mL. A specific band was
detected for AlphaA Crystallin/CRYAA at
approximately 28 kDa (as indicated) using
1 µg/mL of Goat Anti-Human/Mouse
AlphaA Crystallin/CRYAA Antigen Affinitypurified Polyclonal Antibody (Catalog #
AF4848) followed by 1:50 dilution of HRPconjugated Anti-Goat IgG Secondary
Antibody (Catalog # HAF109). This
experiment was conducted under
reducing conditions and using the
12-230 kDa separation system.

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.

- 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

AlphaA Crystallin (CRYAA, also known as Crystallin α-A chain and HspB4) is a 21-22 kDa member of the HSP20 family of proteins. It is found in lens epithelium where it noncovalently oligomerizes with CRY-αB to generate a transparent 350-1000 kDa α-Crystallin protein complex. Human CRYAA is 173 amino acids (aa) in length. There is a α-Crystallin Hsp domain over aa 63-145. Multiple posttranslational modifications may exist. The C-terminal Ser and the N-terminal MetAspVal is occasionally cleaved. There is also phosphorylation at Ser45 and 122, O-linked GlcNAc modification at Ser162, deamidation at Asn101, and acetylation at Lys70. Full-length human CRYAA is 54% aa identical to CRY-AlphaB, and 95% aa identical to mouse CRYAA.

Rev. 2/6/2018 Page 1 of 1

