

Anti-CRYAA antibody



Description	Unconjugated Rabbit polyclonal to CRYAA
Model	STJ190294
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human CRYAA protein.
Immunogen Region	1-80aa
Gene ID	102724652
Gene Symbol	CRYAA
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	CRYAA Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Expressed in eye lens.
Purification	CRYAA antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Alpha-crystallin A chain Heat shock protein beta-4 HspB4 Alpha-crystallin A 1-172 Alpha-crystallin A 1-168 Alpha-crystallin A 1-162
Molecular Weight	19 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:23880 MIM:123580
Alternative Names	Alpha-crystallin A chain Heat shock protein beta-4 HspB4 Alpha-crystallin A 1-172 Alpha-crystallin A 1-168 Alpha-crystallin A 1-162
Function	Contributes to the transparency and refractive index of the lens. Has chaperone-like activity, preventing aggregation of various proteins under a wide range of stress conditions.
Cellular Localization	Cytoplasm Nucleus. Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles.
Post-translational Modifications	O-glycosylated; contains N-acetylglucosamine side chains.; Deamidation of Asn-101 in lens occurs mostly during the first 30 years of age, followed by a small additional amount of deamidation (approximately 5%) during the next approximately 38 years, resulting in a maximum of approximately 50% deamidation during the lifetime of the individual. Phosphorylation on Ser-122 seems to be developmentally regulated. Absent in the first months of life, it appears during the first 12 years of human lifetime. The relative amount of phosphorylated form versus unphosphorylated form does not change over the lifetime of the individual. Acetylation at Lys-70 seems to increase chaperone activity. Undergoes age-dependent proteolytical cleavage at the C-terminus. Alpha-crystallin A(1-172) is the most predominant form produced most rapidly during the first 12 years of age and after this age is present in approximately 50% of the lens molecules.