

Human Alpha B Crystallin ELISA Kit | CRYAB elisa kit

Alpha B Crystallin StressXpress ELISA Kit

CATALOG #
AAA103768

REACTIVITY
Human

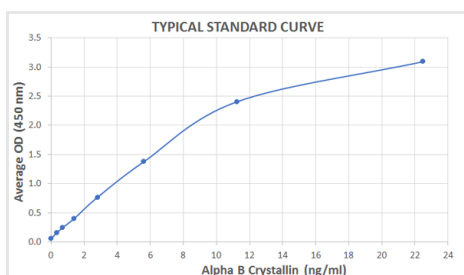
PRODUCT SYNONYMS

Alpha B Crystallin; Alpha B Crystallin StressXpress ELISA Kit; AACRYA; CRYA2; CRYAB; CTPP2; HspB5; NY Ren 27 antigen antibody; alpha crystallin B antibody; Alpha B Crystallin ELISA; Enzyme-Linked Immunosorbent Assay; CRYAB elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Sequence Length	69
Samples	Cell lysates, Tissue extracts, Serum samples
Detection Range	0.352-22.5 ng/mL
Sensitivity	0.009 ng/mL
Incubation Time	30 minutes
Number of Samples	40 samples in duplicate
Preparation and Storage	4 degree C

IMAGES



Standard Curve (Sample)

Typical Standard Curve for the Alpha B Crystallin ELISA Kit (Enzyme-Linked Immunosorbent Assay) StressXpress® - SKT-123. Assay Type: Sandwich ELISA. Detection Method: Colorimetric Assay. Assay Range: 0.352 - 22.5 ng/mL.

ADDITIONAL INFORMATION

Related Product Information for CRYAB elisa kit	Background Info: ELISA kit used to quantitate alpha B crystallin concentration in samples Scientific Background: The alpha-crystallins are major water-soluble lens structural proteins of the vertebrate eye that are related to the small heat shock protein family. The alpha-crystallins possess structural and functional similarities with Hsp25 and Hsp27 (1). Mammalian lens cystallins are divided into alpha, beta and gamma families. Alpha and beta families are further divided into acidic and basic groups (Alpha-A and Alpha-B respectively). In the lens, alpha-crystallin primarily functions to maintain proper refractive index, however it can also function as a molecular chaperone that binds to the denatured proteins, keeping them in solution and thereby maintaining the translucency of the lens. When cellular stress occurs, alpha-crystallin enters its' phosphorylated state and may serve a structural control function and play a role in protein maintenance (2). In addition to their interaction with proteins, alpha-crystallins also interact with native molecules such as membrane proteins, Golgi matrix protein, structural proteins, nuclear proteins and DNA (3-7). Two other functions are an autokinase activity and participation in the intracellular architecture, and it has also been proven that both alpha-A and B prevent apoptosis by inhibiting caspases (8). Specifically, alpha-B cystallin is found in many cells and organs outside the lens, and alpha B is overexpressed in several neurological disorders and in cell lines under stress conditions (9).
Product Categories/Family for CRYAB elisa kit	Chaperones; Heat Shock
References	1. Merck K.B., et al. (1993) J Biol Chem. 268: 1046-1052. 2. Horwitz J. (1992) Proc Natl Acad Sci USA. 89(21):10449-10453. 3. Cobb B.A. and Pettrash J.M. (2002) Biochemistry. 41:483-490 4. Horwitz J. (2003) Exp Eye Res. 76: 145-153. 5. Bullard B., et al. (2004) J Biol Chem. 279: 7917-7924. 6. Gangalum R.K., Schibler M.J. and Bhat S.P. (2004) J Biol Chem. 279: 43374.43377. 7. Maddala R. and Rao V.P. (2005) Exp Cell Res. 306: 203-215. 8. Yaung J., et al. (2007) Molecular Vision 13: 566-577. 9. Head M.W., et al. (2000) Neuropathol Appl Neurobiol. 26: 304-312.

NCBI AND UNIPROT INFORMATION

NCBI GI #	537532
NCBI GeneID	1410
Molecular Weight	20,159 Da
NCBI Official Full Name	alpha-B-crystallin, partial
NCBI Official Synonym Full Names	crystallin, alpha B
NCBI Official Symbol	CRYAB
NCBI Official Synonym Symbols	MFM2; CRYA2; CTPP2; HSPB5; CMD1II; CTRCT16; HEL-S-101
NCBI Protein Information	alpha-crystallin B chain; heat shock protein beta-5; rosenthal fiber component; heat-shock 20 kD like-protein; renal carcinoma antigen NY-REN-27; epididymis secretory protein Li 101
UniProt Protein Name	Alpha-crystallin B chain
UniProt Gene Name	CRYAB
UniProt Synonym Gene Names	CRYA2; HspB5
UniProt Entry Name	CRYAB_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.