

## ARG83360 Human Alpha B Crystallin ELISA Kit

Package: 96 wells

Store at: 4°C

### Summary

Product Description	ARG83360 Human Alpha B Crystallin ELISA Kit is for the detection of human Alpha B Crystallin in serum, cell lysate and tissue lysate.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	No significant cross-reactivity or interference with Human Alpha A Crystallin.
Target Name	alpha B Crystallin
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm
Sensitivity	less than 0.01 ng/ml
Detection Range	0.352 - 22.5 ng/ml
Sample Type	serum, cell lysate and tissue lysate
Sample Volume	100 µl
Alternate Names	CRYAB; Crystallin Alpha B; HSPB5; CRYA2; Heat Shock Protein Family B Member 5; Renal Carcinoma Antigen NY-REN-27; Heat Shock Protein Beta-5; Rosenthal Fiber Component; Alpha-Crystallin B Chain; Epididymis Secretory Protein Li 101; Heat-Shock 20 KD Like-Protein; Crystallin, Alpha B; Alpha(B)-Crystallin; HEL-S-101; CTRCT16; CMD1II; CTPP2; HspB5; MFM2

### Application Instructions

Assay Time	3.5 hour
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### Properties

Form	96 well
Storage instruction	All reagents are stable at 4°C. For optimum storage, the standard should be aliquotted into smaller portions and then stored appropriately. Avoid repeated freeze/thaw cycles. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Gene Symbol	CRYAB
Gene Full Name	Crystallin Alpha B
Background	Mammalian lens crystallins are divided into alpha, beta, and gamma families. Alpha crystallins are composed of two gene products: alpha-A and alpha-B, for acidic and basic, respectively. Alpha crystallins can be induced by heat shock and are members of the small heat shock protein (HSP20) family. They act as molecular chaperones although they do not renature proteins and release them in

the fashion of a true chaperone; instead they hold them in large soluble aggregates. Post-translational modifications decrease the ability to chaperone. These heterogeneous aggregates consist of 30-40 subunits; the alpha-A and alpha-B subunits have a 3:1 ratio, respectively. Two additional functions of alpha crystallins are an autokinase activity and participation in the intracellular architecture. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Alpha-A and alpha-B gene products are differentially expressed; alpha-A is preferentially restricted to the lens and alpha-B is expressed widely in many tissues and organs. Elevated expression of alpha-B crystallin occurs in many neurological diseases; a missense mutation cosegregated in a family with a desmin-related myopathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

**Function**

May contribute 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. In lens epithelial cells, stabilizes the ATP6V1A protein, preventing its degradation by the proteasomes. [UniProt]

**Highlight**

New ELISA data calculation tool:  
[Simplify the ELISA analysis by GainData](#)