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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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StressXpress®
Alpha B Crystallin ELISA Kit

Colorimetric detection of Alpha B Crystallin
Catalog No. SKT-123



Discovery through partnership | Excellence through quality

Overview

Product Name

Alpha B Crystallin ELISA Kit

Description

Colorimetric detection of Alpha B Crystallin

Species Reactivity

Human

Platform

Microplate

Sample Types

Cell lysates, Serum, Tissue

Detection Method

Colorimetric Assay

Assay Type

Sandwich ELISA (Enzyme-linked Immunosorbent Assay)

Utility

ELISA kit used to quantitate alpha B crystallin concentration in samples.

Sensitivity

0.009 ng/ml

Assay Range

0.352 - 22.5 ng/ml

Incubation Time

30 minutes

Number Of Samples

40 samples in duplicate

Other Resources

Kit Booklet, MSDS

Properties

Storage Temperature

4°C

Shipping Temperature

Blue Ice

Product Type

ELISA Kits

Assay Overview

1. Prepare Standard and samples in Standard and Sample Diluent.
 2. Add 100 µL of Standard or sample to appropriate wells.
 3. Cover plate with Plate Sealer and incubate at room temperature (20-25°C) for 1 hour.
 4. Wash plate four times with 1X Wash Buffer.
 5. Add 100 µL of Biotinylated Antibody Working Solution to each well.
 6. Cover plate with Plate Sealer and incubate at room temperature for 1 hour.
 7. Wash plate four times with 1X Wash Buffer.
 8. Add 100 µL of Streptavidin-HRP Working Solution to each well.
 9. Cover plate with Plate Sealer and incubate at room temperature for 30 minutes.
 10. Wash plate four times with 1X Wash Buffer.
 11. Add 100 µL of TMB Substrate to each well.
 12. Develop the plate in the dark at room temperature for 30 minutes.
 13. Stop reaction by adding 100 µL of Stop Solution to each well.
 14. Measure absorbance on a plate reader at 450 nm.
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Kit Components

Component No.**Item****Quantity / Size**

SKC-123A

Anti-Alpha B Crystallin Immunoassay Plate

1 Plate

SKC-123B

5X Alpha B Crystallin Extraction Reagent

1 vial/10 ml

SKC-123C

Recombinant Alpha B Crystallin Standard

2 vials

SKC-123D

Standard and Sample Diluent

1 vial/ 50 ml

SKC-123E

10X Wash Buffer Concentrate

1 vial/100 ml

SKC-123F

Anti-Alpha B Crystallin Biotinylated Antibody Concentrate

1 vial/150 µl

SKC-123G

Anti-Alpha B Crystallin Biotinylated Antibody Diluent

1 vial/ 13 ml

SKC-123H

Streptavidin: HRP Concentrate

1 vial/150 µl

SKC-123I

Streptavidin: HRP Diluent

1 vial/ 13 ml

SKC-123J

TMB Substrate

1 vial/ 13 ml

SKC-123K

Stop Solution

1 vial/ 13 ml

Cite This Product

Alpha B Crystallin ELISA Kit (StressMarq Biosciences Inc., Victoria BC CANADA, Catalog # SKT-123)

Biological Description

Alternative Names

AACRYA ELISA Kit, CRYA2 ELISA Kit, CRYAB ELISA Kit, CTPP2 ELISA Kit, HSPB5 ELISA Kit, NY Ren 27 antigen ELISA Kit, alpha crystallin B ELISA Kit

Research Areas

Cancer, Heat Shock

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 crystallins 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, 4, 5, 6, and 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 crystallin 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).

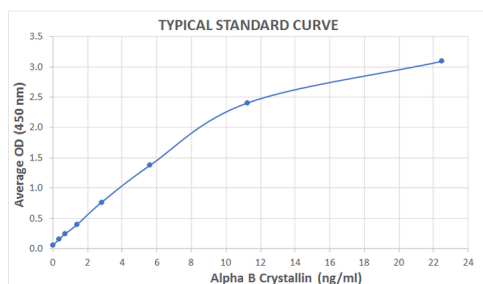
References

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9. Head M.W. et al. (2000) *Neuropathol Appl Neurobiol*. 26: 304-312.

Product Images

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.



Product Citations (1)

Other Citations

Level of vitreous alpha-B crystallin in eyes with rhegmatogenous retinal detachment.

Baba, T., Oshitari, T. and Yamamoto, S. -2014 *Graefes Arch Clin Exp Ophthalmol*. 253(8):1251-4.

PubMed ID: 25311653 **Reactivity:** Human

Reviews

There are no reviews yet.