

A5725

Leader in Biomolecular Solutions for Life Science



CRYAA Rabbit pAb

Catalog No.: A5725

1 Publications

Basic Information

Observed MW

19kDa

Calculated MW

20kDa

Category

Polyclonal Antibody

Applications

WB,IF/ICC,ELISA

Cross-Reactivity

Human,Mouse,Rat,Zebrafish

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. Defects in this gene cause autosomal dominant congenital cataract (ADCC).

Recommended Dilutions

WB 1:2000 - 1:6000**IF/ICC** 1:50 - 1:200

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

1409

Swiss Prot

P02489

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

CRYA1; HSPB4; CTRCT9; CRYAA

Contact

www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

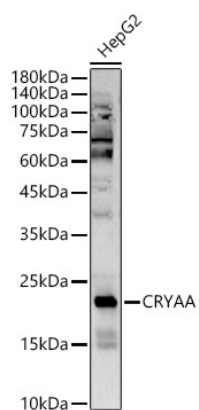
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Validation Data



Western blot analysis of lysates from HepG2 cells, using CRYAA Rabbit pAb (A5725) at 1:5000 dilution.

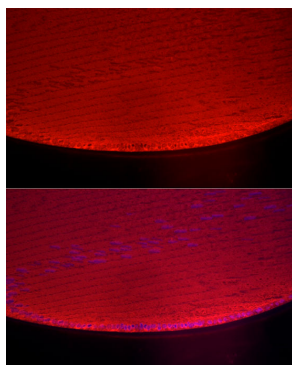
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 180s.



Immunofluorescence analysis of paraffin-embedded Rat Eye using CRYAA Rabbit pAb (A5725) at dilution of 1:200 (40x lens).

Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.