

A5111

Leader in Biomolecular Solutions for Life Science



CRYAA Rabbit mAb

Catalog No.: A5111 **Recombinant** **5 Publications**

Basic Information

Observed MW

18kDa

Calculated MW

20kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IF/ICC,ELISA

Cross-Reactivity

Mouse,Rat

CloneNo number

ARC1245

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	1:500 - 1:2000
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID	Swiss Prot
1409	P02489

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 6-95 of human CRYAA (P02489).

Synonyms

CRYA1; HSPB4; CTRCT9; CRYAA

Contact



www.abclonal.com

Product Information

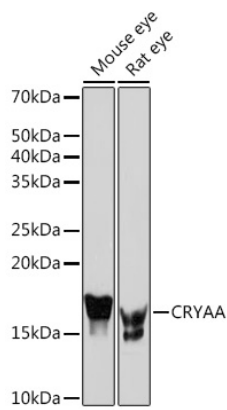
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

Storage

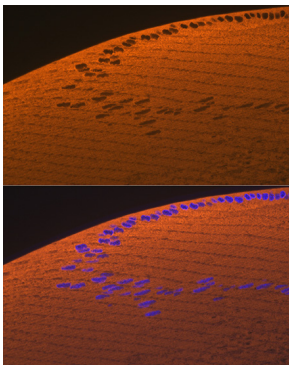
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.

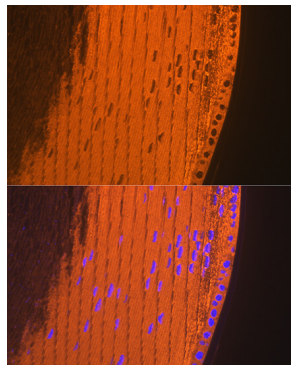
Validation Data



Western blot analysis of extracts of various cell lines, using CRYAA Rabbit mAb (A5111) at 1:1000 dilution.
Secondary antibody: HRP 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: 60s.



Immunofluorescence analysis of rat eye using CRYAA Rabbit mAb (A5111) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of mouse eye using CRYAA Rabbit mAb (A5111) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.