10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CRYBA1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12377c

Product Information

Application	WB, IHC-P, E
Primary Accession	P05813
Other Accession	NP_005199.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31287
Calculated MW	25150
Antigen Region	104-133

Additional Information

Gene ID	1411
Other Names	Beta-crystallin A3, Beta-crystallin A3, isoform A1, Delta4 form, Beta-crystallin A3, isoform A1, Delta7 form, Beta-crystallin A3, isoform A1, Delta8 form, CRYBA1, CRYB1
Target/Specificity	This CRYBA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 104-133 amino acids from the Central region of human CRYBA1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CRYBA1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CRYBA1 (HGNC:2394)
Synonyms	CRYB1

Function Crystallins are the dominant structural components of the vertebrate eye lens.

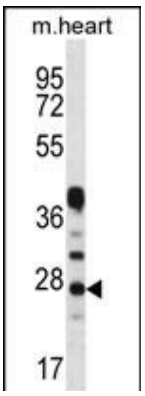
Background

Crystallins are separated into two classes: taxon-specific, or enzyme, and ubiquitous. The latter class constitutes the major proteins of vertebrate eye lens and maintains the transparency and refractive index of the lens. Since lens central fiber cells lose their nuclei during development, these crystallins are made and then retained throughout life, making them extremely stable proteins. Mammalian lens crystallins are divided into alpha, beta, and gamma families; beta and gamma crystallins are also considered as a superfamily. Alpha and beta families are further divided into acidic and basic groups. Seven protein regions exist in crystallins: four homologous motifs, a connecting peptide, and N- and C-terminal extensions. Beta-crystallins, the most heterogeneous, differ by the presence of the C-terminal extension (present in the basic group, none in the acidic group). Beta-crystallins form aggregates of different sizes and are able to self-associate to form dimers or to form heterodimers with other beta-crystallins. This gene, a beta acidic group member, encodes two proteins (crystallin, beta A3 and crystallin, beta A1) from a single mRNA, the latter protein is 17 aa shorter than crystallin, beta A3 and is generated by use of an alternate translation initiation site. Deletion of exons 3 and 4 causes the autosomal dominant disease 'zonular cataract with sutural opacities'.

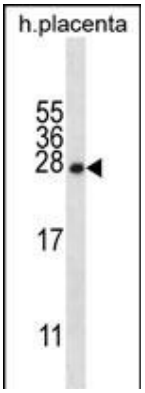
References

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Srivastava, K., et al. Biochemistry 48(30):7179-7189(2009)
Gupta, R., et al. J. Biol. Chem. 284(27):18481-18492(2009)
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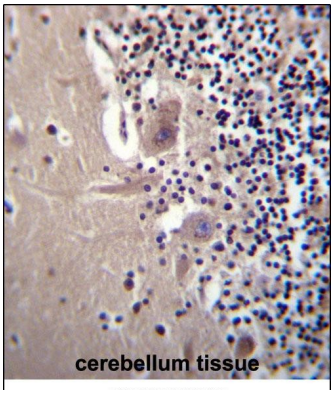
Images



CRYBA1 Antibody (Center) (Cat. #AP12377c) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the CRYBA1 antibody detected the CRYBA1 protein (arrow).



CRYBA1 Antibody (Center) (Cat. #AP12377c) western blot analysis in human placenta tissue lysates (35ug/lane).This demonstrates the CRYBA1 antibody detected the CRYBA1 protein (arrow).



CRYBA1 Antibody (Center) (Cat. #AP12377c)immunohistochemistry analysis in formalin fixed and paraffin embedded human cerebellum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of CRYBA1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.