

CRYBA1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12377c

Specification

CRYBA1 Antibody (Center) - Product Information

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

CRYBA1 Antibody (Center) - 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

IHC-P~~1:10~50

WB~~1:1000

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.

CRYBA1 Antibody (Center) - Protein Information

Name CRYBA1 ([HGNC:2394](#))

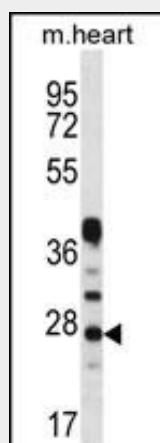
Synonyms CRYB1

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

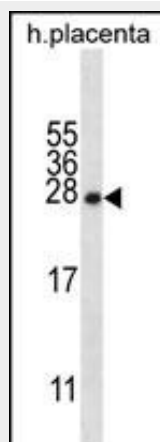
CRYBA1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

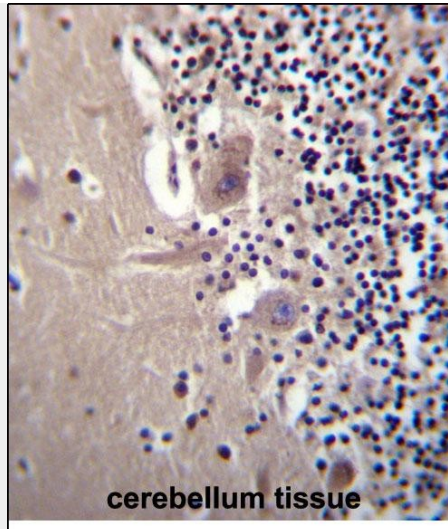
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CRYBA1 Antibody (Center) - 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.

CRYBA1 Antibody (Center) - 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'.

CRYBA1 Antibody (Center) - References

Xu, J., et al. Mol. Vis. 16, 438-444 (2010) :
Gu, Z., et al. Mol. Vis. 16, 154-160 (2010) :
Srivastava, K., et al. Biochemistry 48(30):7179-7189(2009)
Gupta, R., et al. J. Biol. Chem. 284(27):18481-18492(2009)
Takata, T., et al. Mol. Vis. 15, 241-249 (2009) :