

## Product datasheet for **AP51091PU-N**

### beta Crystallin A3 (CRYBA1) (Center) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>ELISA:</b> 1/1000 <b>Western blot:</b> 1/100-1/500. <b>Immunohistochemistry on Paraffin Sections:</b> 1/10-1/50.
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide between 111-141 amino acids from the Central region of Human CRYBA1.
Specificity:	This antibody recognizes Human and Mouse Beta-crystallin A3.
Formulation:	PBS State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	crystallin beta A1
Database Link:	<a href="#">Entrez Gene 12957 Mouse</a> <a href="#">Entrez Gene 1411 Human</a> <a href="#">P05813</a>



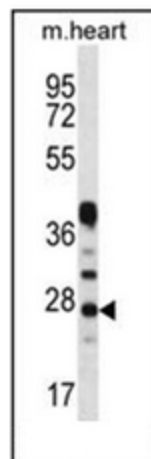
[View online »](#)

**Background:**

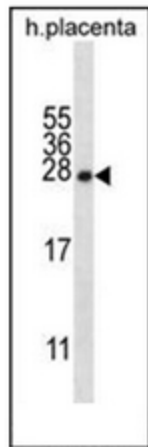
Crystallins are separated into two classes: taxon-specific, or enzyme, and ubiquitous. The latter class constitutes the major proteins of vertebrate eye lens and maintains the transparency and refractive index of the lens. Since lens central fiber cells lose their nuclei during development, these crystallins 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'

**Synonyms:**

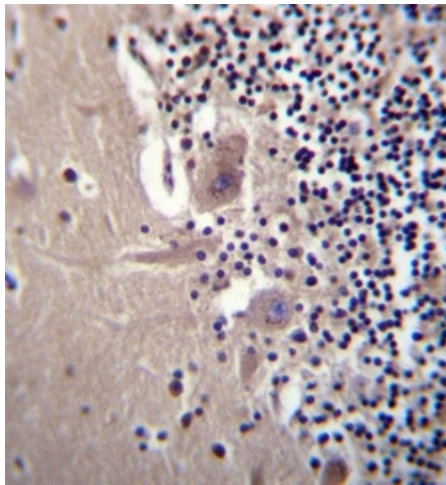
CRYBA1, CRYB1

**Note:****Molecular Weight:** 25150 Da**Product images:**

Western blot analysis of Beta-crystallin A3 Antibody in Mouse heart tissue lysates (35ug/lane). This demonstrates the CRYBA1 antibody detected the CRYBA1 protein (arrow).



Western blot analysis of Beta-crystallin A3 Antibody in human placenta tissue lysates (35ug/lane). This demonstrates the CRYBA1 antibody detected the CRYBA1 protein (arrow).



Formalin fixed, paraffin embedded human cerebellum tissue stained with Beta-crystallin A3 Antibody followed by peroxidase conjugation of the secondary antibody and DAB staining.