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Rabbit Anti-CRYBB3/AP Conjugated antibody

SL14074R-AP

Product Name	Anti-CRYBB3/AP
Chinese Name	碱性磷酸酶（AP）标记的β晶状体蛋白 B3 抗体
Alias	Beta B3 crystallin; Beta crystallin B3; Beta-B3 crystallin; Beta-crystallin B3; CRBB3_HUMAN; CRYB3; Crybb3.
Research Area	Cell biology Neurobiology
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Rat(predicted:Human,Mouse,Dog,Pig,Cow,Horse,Rabbit,Sheep)
Applications	IHC-P=1:100-500,IHC-F=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	24kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human CRYBB3
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**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 basic group member, is part of a gene cluster with beta-A4, beta-B1, and beta-B2. Mutations in this gene result in cataract congenital nuclear autosomal recessive type 2. [provided by RefSeq, Feb 2013]

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

DISEASE:
Defects in CRYBB3 are the cause of cataract congenital nuclear autosomal recessive type 2 (CATCN2) [MIM:609741]. A congenital cataract affecting the central nucleus of the eye. Nuclear cataracts are often not highly visually significant. The density of the opacities varies greatly from fine dots to a dense, white and chalk-like, central cataract. The condition is usually bilateral. Nuclear cataracts are often combined with opacified cortical fibers encircling the nuclear opacity, which are referred to as cortical riders.

Similarity:
Belongs to the beta/gamma-crystallin family.
Contains 4 beta/gamma crystallin 'Greek key' domains.

Database links:

Entrez Gene: 1417 Human

Omim: 123630 Human

SwissProt: P26998 Human

Unigene: 533022 Human

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.