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CRYBB3 Rabbit pAb

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Catalog # AP55408

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P26998
Reactivity	Rat
Predicted	Human, Mouse, Dog, Pig, Horse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24252
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CRYBB3
Epitope Specificity	131-211/211
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the beta/gamma-crystallin family. Contains 4 beta/gamma crystallin 'Greek key' domains.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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]

Additional Information

Gene ID	1417
Other Names	Beta-crystallin B3, Beta-B3 crystallin, Beta-crystallin B3, N-terminally processed, CRYBB3, CRYB3
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

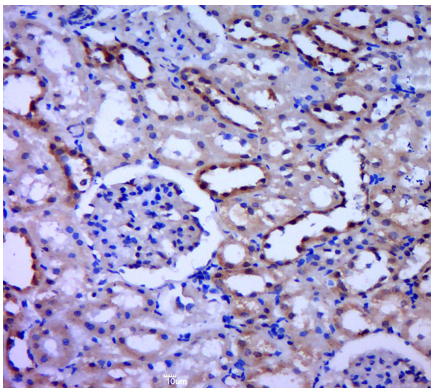
Protein Information

Name	CRYBB3
Synonyms	CRYB3
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 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]

Images



Paraformaldehyde-fixed, paraffin embedded (rat kidney tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CRYBB3) Polyclonal Antibody, Unconjugated (AP55408) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.