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gamma C Crystallin Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55118

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	P07315
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20879
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human gamma C Crystallin/CRYG3
Epitope Specificity	101-174/174
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.
SUBUNIT	Monomer (By similarity).
DISEASE	Defects in CRYGC are a cause of cataract autosomal dominant (ADC) [MIM:604219]. Cataract is an opacification of the crystalline lens of the eye that frequently results in visual impairment or blindness. Opacities vary in morphology, are often confined to a portion of the lens, and may be static or progressive. In general, the more posteriorly located and dense an opacity, the greater the impact on visual function. Cataract is the most common treatable cause of visual disability in childhood. Defects in CRYGC are a cause of cataract Coppock-like (CCL) [MIM:604307]. A congenital pulverulent disk-like opacity involving the embryonic nucleus with many tiny white dots in the lamellar portion of the lens. It is usually bilateral and dominantly inherited.
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 the major proteins of the vertebrate eye lens, where they maintain the transparency and refractive index of the lens. Crystallins are divided into alpha, beta, and gamma families, and the beta and gamma-crystallins also comprise a superfamily. Crystallins usually contain seven distinctive protein regions, including four homologous motifs, a connecting peptide, and N- and C-terminal extensions. gamma-crystallins are structural proteins in the lens, and they exists as monomers which typically lack connecting peptides and terminal extensions. The gamma-crystallins include seven closely related gamma A, gamma B, gamma C, gamma D, gamma E, gamma F, and gamma G-crystallin, as well as the gamma N and gamma S-crystallin genes. The gamma-crystallins are differentially regulated after early development, and are involved in cataract formation as a result of either age-related protein degradation or genetic mutation.

Additional Information

Gene ID	1420
Other Names	Gamma-crystallin C, Gamma-C-crystallin, Gamma-crystallin 2-1, Gamma-crystallin 3, CRYGC, CRYG3
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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	CRYGC
Synonyms	CRYG3
Function	Crystallins are the dominant structural components of the vertebrate eye lens.