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CRYGD Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18816c

Product Information

Application	WB, E
Primary Accession	P07320
Other Accession	P10067, NP_008822.2
Reactivity	Human
Predicted	Rat, Mouse, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB39369
Calculated MW	20738
Antigen Region	73-101

Additional Information

Gene ID	1421
Other Names	Gamma-crystallin D, Gamma-D-crystallin, Gamma-crystallin 4, CRYGD, CRYG4
Target/Specificity	This CRYGD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 73-101 amino acids from the Central region of human CRYGD.
Dilution	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	CRYGD Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CRYGD
Synonyms	CRYG4
Function	Crystallins are the dominant structural components of the vertebrate eye

lens.

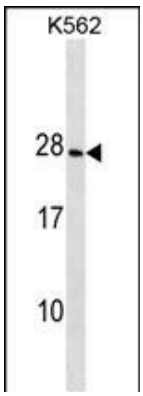
Background

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. Gamma-crystallins are a homogeneous group of highly symmetrical, monomeric proteins typically lacking connecting peptides and terminal extensions. They are differentially regulated after early development. Four gamma-crystallin genes (gamma-A through gamma-D) and three pseudogenes (gamma-E, gamma-F, gamma-G) are tandemly organized in a genomic segment as a gene cluster. Whether due to aging or mutations in specific genes, gamma-crystallins have been involved in cataract formation.

References

Acosta-Sampson, L., et al. J. Mol. Biol. 401(1):134-152(2010)
Wang, Y., et al. Proc. Natl. Acad. Sci. U.S.A. 107(30):13282-13287(2010)
Pande, A., et al. Biochemistry 49(29):6122-6129(2010)
Das, P., et al. Protein Sci. 19(1):131-140(2010)
Roshan, M., et al. Mol. Vis. 16, 887-896 (2010) :

Images



CRYGD Antibody (Center)(Cat. #AP18816c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the CRYGD antibody detected the CRYGD protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.