

CRYGD Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18816c

Specification

CRYGD Antibody (Center) - Product Information

Application WB,E
Primary Accession P07320

Other Accession <u>P10067</u>, <u>NP 008822.2</u>

Reactivity
Predicted
Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rat
Rabbit
Rabbit
Polyclonal
Rabbit IgG
73-101

CRYGD Antibody (Center) - 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.

CRYGD Antibody (Center) - Protein Information

Name CRYGD



Synonyms CRYG4

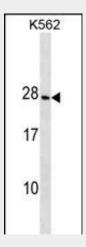
Function Crystallins are the dominant structural components of the vertebrate eye lens.

CRYGD Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CRYGD Antibody (Center) - 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).

CRYGD Antibody (Center) - 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.

CRYGD Antibody (Center) - 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):