

CHM Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20084c

Specification

CHM Antibody (Center) - Product Information

Application WB,E **Primary Accession** P24386 Other Accession NP 000381.1 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 73476 Antigen Region 292-320

CHM Antibody (Center) - Additional Information

Gene ID 1121

Other Names

Rab proteins geranylgeranyltransferase component A 1, Choroideremia protein, Rab escort protein 1, REP-1, TCD protein, CHM, REP1, TCD

Target/Specificity

This CHM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 292-320 amino acids from the Central region of human CHM.

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

CHM Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CHM Antibody (Center) - Protein Information

Name CHM





Synonyms REP1, TCD

Function Substrate-binding subunit of the Rab geranylgeranyltransferase (GGTase) complex. Binds unprenylated Rab proteins and presents the substrate peptide to the catalytic component B composed of RABGGTA and RABGGTB, and remains bound to it after the geranylgeranyl transfer reaction. The component A is thought to be regenerated by transferring its prenylated Rab back to the donor membrane. Besides, a pre-formed complex consisting of CHM and the Rab GGTase dimer (RGGT or component B) can bind to and prenylate Rab proteins; this alternative pathway is proposed to be the predominant pathway for Rab protein geranylgeranylation.

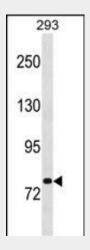
Cellular Location Cytoplasm, cytosol.

CHM Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CHM Antibody (Center) - Images



CHM Antibody (Center) (Cat. #AP20084c) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the CHM antibody detected the CHM protein (arrow).

CHM Antibody (Center) - Background

This gene encodes component A of the RAB geranylgeranyl transferase holoenzyme. In the dimeric holoenzyme, this subunit binds unprenylated Rab GTPases and then presents them to the catalytic Rab GGTase subunit for the geranylgeranyl transfer reaction. Rab GTPases need to be geranylgeranyled on either one or two cysteine residues in their C-terminus to localize to the correct intracellular membrane. Mutations in this gene are a cause





of choroideremia; also known as tapetochoroidal dystrophy (TCD). This X-linked disease is characterized by progressive dystrophy of the choroid, retinal pigment epithelium and retina. Alternative splicing results in multiple transcript variants encoding different isoforms.

CHM Antibody (Center) - References

Perez-Cano, H.J., et al. Am. J. Med. Genet. A 149A (10), 2134-2140 (2009): Renner, A.B., et al. Arch. Ophthalmol. 127(7):907-912(2009)
Sergeev, Y.V., et al. Mutat. Res. 665 (1-2), 44-50 (2009):
MacDonald, I.M., et al. Surv Ophthalmol 54(3):401-407(2009)
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