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CHM Blocking Peptide (Center)
Synthetic peptide
Catalog # BP20084c

Specification

CHM Blocking Peptide (Center) - Product Information

Primary Accession	P24386
Other Accession	NP_000381.1

CHM Blocking Peptide (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
The synthetic peptide sequence is selected from aa 307-320 of HUMAN CHM

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CHM Blocking Peptide (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.

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CHM Blocking Peptide (Center) - Protocols

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

- Blocking Peptides

CHM Blocking Peptide (Center) - Images

CHM Blocking Peptide (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 Blocking Peptide (Center) - References

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Renner, A.B., et al. Arch. Ophthalmol. 127(7):907-912(2009)
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MacDonald, I.M., et al. Surv Ophthalmol 54(3):401-407(2009)
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