

GDI2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13787c

Specification

GDI2 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region IHC-P, WB,E <u>P50395</u> <u>NP_001485.2</u>, <u>NP_001108628.1</u> Human Rabbit Polyclonal Rabbit IgG 135-164

GDI2 Antibody (Center) - Additional Information

Gene ID 2665

Other Names

Rab GDP dissociation inhibitor beta, Rab GDI beta, Guanosine diphosphate dissociation inhibitor 2, GDI-2, GDI2, RABGDIB

Target/Specificity

This GDI2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 135-164 amino acids from the Central region of human GDI2.

Dilution IHC-P~~1:10~50 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

GDI2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

GDI2 Antibody (Center) - Protein Information

Name GDI2



Synonyms RABGDIB

Function GDP-dissociation inhibitor preventing the GDP to GTP exchange of most Rab proteins. By keeping these small GTPases in their inactive GDP-bound form regulates intracellular membrane trafficking (PubMed:<u>25860027</u>). Negatively regulates protein transport to the cilium and ciliogenesis through the inhibition of RAB8A (PubMed:<u>25860027</u>).

Cellular Location

Cytoplasm. Membrane; Peripheral membrane protein. Golgi apparatus, trans-Golgi network

Tissue Location Ubiquitous..

GDI2 Antibody (Center) - Protocols

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

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

GDI2 Antibody (Center) - Images



GDI2 Antibody (Center) (Cat. #AP13787c) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the GDI2 antibody detected the GDI2 protein (arrow).





GDI2 Antibody (Center) (AP13787c)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of GDI2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

GDI2 Antibody (Center) - Background

GDP dissociation inhibitors are proteins that regulate the GDP-GTP exchange reaction of members of the rab family, small GTP-binding proteins of the ras superfamily, that are involved in vesicular trafficking of molecules between cellular organelles. GDIs slow the rate of dissociation of GDP from rab proteins and release GDP from membrane-bound rabs. GDI2 is ubiquitously expressed. The GDI2 gene contains many repetitive elements indicating that it may be prone to inversion/deletion rearrangements. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

GDI2 Antibody (Center) - References

Rikova, K., et al. Cell 131(6):1190-1203(2007) Sun, Z.L., et al. Biochim. Biophys. Acta 1774(6):764-771(2007) Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007) Grupe, A., et al. Am. J. Hum. Genet. 78(1):78-88(2006) Shin, B.K., et al. J. Biol. Chem. 278(9):7607-7616(2003) **GDI2 Antibody (Center) - Citations**

• RAB7A phosphorylation by TBK1 promotes mitophagy via the PINK-PARKIN pathway.