10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GDI2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13787c

Product Information

Application	WB, IHC-P, E
Primary Accession	P50395
Other Accession	NP_001485.2, NP_001108628.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33933
Calculated MW	50663
Antigen Region	135-164

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	WB~~1:1000 IHC-P~~1:100~500 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.

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:25860027). Negatively regulates protein transport to the cilium and ciliogenesis through the inhibition of RAB8A (PubMed:25860027).

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

Tissue Location Ubiquitous..

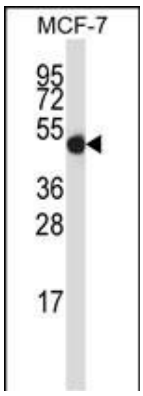
Background

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.

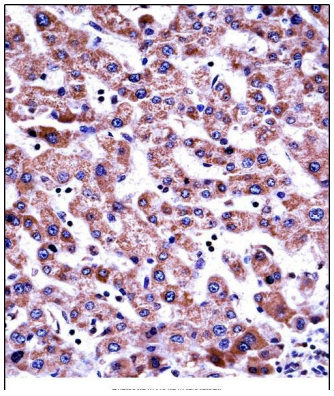
References

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)

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.

Citations

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