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GDI1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20083b

Product Information

Application	WB, E
Primary Accession	P31150
Other Accession	P50398, P50396, Q8HXX7, P21856, NP_001484.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Monkey, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42409
Calculated MW	50583
Antigen Region	415-443

Additional Information

Gene ID	2664
Other Names	Rab GDP dissociation inhibitor alpha, Rab GDI alpha, Guanosine diphosphate dissociation inhibitor 1, GDI-1, Oligophrenin-2, Protein XAP-4, GDI1, GDIL, OPHN2, RABGDIA, XAP4
Target/Specificity	This GDI1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 415-443 amino acids from the C-terminal region of human GDI1.
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	GDI1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GDI1
Synonyms	GDIL, OPHN2, RABGDIA, XAP4

Function	Regulates the GDP/GTP exchange reaction of most Rab proteins by inhibiting the dissociation of GDP from them, and the subsequent binding of GTP to them. Promotes the dissociation of GDP-bound Rab proteins from the membrane and inhibits their activation. Promotes the dissociation of RAB1A, RAB3A, RAB5A and RAB10 from membranes.
Cellular Location	Cytoplasm. Golgi apparatus, trans-Golgi network
Tissue Location	Brain; predominant in neural and sensory tissues.

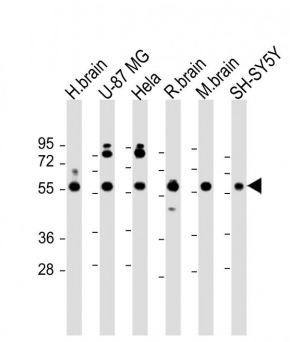
Background

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. GDI1 is expressed primarily in neural and sensory tissues. Mutations in GDI1 have been linked to X-linked nonspecific mental retardation.

References

Martins-de-Souza, D., et al. J Psychiatr Res 44(14):989-991(2010)
Massignan, T., et al. Mol. Cell Proteomics 9(4):611-622(2010)
Chen, Y., et al. Biochem. J. 422(2):229-235(2009)
Zhang, K.J., et al. Yi Chuan 30(5):590-594(2008)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :

Images



All lanes : Anti-GDI1 Antibody (C-term) at 1:2000 dilution Lane 1: human brain lysate Lane 2: U-87 MG whole cell lysate Lane 3: Hela whole cell lysate Lane 4: rat brain lysate Lane 5: mouse brain lysate Lane 6: SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 51 kDa Blocking/Dilution buffer: 5% NFDM/TBST.