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

PITPNM2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13660c

Product Information

Application	WB, E
Primary Accession	Q9BZ72
Other Accession	NP_065896.1
Reactivity	Human
Predicted	Mouse, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33368
Calculated MW	148933
Antigen Region	639-668

Additional Information

Gene ID	57605
Other Names	Membrane-associated phosphatidylinositol transfer protein 2, Phosphatidylinositol transfer protein, membrane-associated 2, PITPnm 2, Pyk2 N-terminal domain-interacting receptor 3, NIR-3, PITPNM2, KIAA1457, NIR3
Target/Specificity	This PITPNM2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 639-668 amino acids from the Central region of human PITPNM2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	PITPNM2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PITPNM2

Synonyms	KIAA1457, NIR3
Function	Membrane-associated phosphatidylinositol (PI) transfer protein that shuttles PI between intracellular membranes and thereby maintains plasma membrane phosphoinositide signaling competence (PubMed:10022914, PubMed:25887399). Upon production of phosphatidic acid (PA), mediates the transfer of phosphatidylinositol from the endoplasmic reticulum to the plasma membrane at endoplasmic reticulum- plasma membrane contact sites. This transfer sustains phospholipase C (PLC)-coupled receptor signaling and replenishing of plasma membrane phosphoinositides following receptor-induced hydrolysis (PubMed:25887399). Promotes PIP2 replenishment following TCR stimulation; plays a critical role in T cell development by supporting calcium signaling in response to weak TCR stimulation during TCRbeta selection and positive selection of thymocytes, as well as maintaining peripheral T cell survival (By similarity).
Cellular Location	Cell membrane; Peripheral membrane protein; Cytoplasmic side. Endoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side. Note=Upon PIP2 hydrolysis, translocates to endoplasmic reticulum-plasma membrane contact sites
Tissue Location	Highly expressed in brain, heart, ovary, testis and thymus. Detected in small intestine, prostate, pancreas, skeletal muscle, liver, colon and placenta.

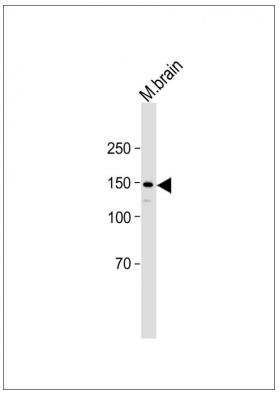
Background

PITPNM2 belongs to a family of membrane-associated phosphatidylinositol transfer domain-containing proteins that share homology with the Drosophila retinal degeneration B (rdgB) protein (Ocaka et al., 2005 [PubMed 15627748]).

References

Ocaka, L., et al. Cytogenet. Genome Res. 108(4):293-302(2005)
Tomsig, J.L., et al. J. Biol. Chem. 278(12):10048-10054(2003)
Lev, S., et al. Mol. Cell. Biol. 19(3):2278-2288(1999)

Images



All lanes: Anti-PITPNM2 Antibody (Center) at 1:2000 dilution + Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 149 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.