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PIST Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7262b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9HD26
Other Accession	Q8BH60
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB13073
Calculated MW	50520
Antigen Region	361-390

Additional Information

Gene ID	57120
Other Names	Golgi-associated PDZ and coiled-coil motif-containing protein, CFTR-associated ligand, Fused in glioblastoma, PDZ protein interacting specifically with TC10, PIST, GOPC, CAL, FIG
Target/Specificity	This PIST antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 361-390 amino acids from the C-terminal region of human PIST.
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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	PIST Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GOPC (HGNC:17643)
Function	Plays a role in intracellular protein trafficking and degradation (PubMed:11707463, PubMed:14570915, PubMed:15358775). May regulate

CFTR chloride currents and acid-induced ASIC3 currents by modulating cell surface expression of both channels (By similarity). May also regulate the intracellular trafficking of the ADR1B receptor (PubMed:15358775). May play a role in autophagy (By similarity). Together with MARCHF2 mediates the ubiquitination and lysosomal degradation of CFTR (PubMed:23818989). Overexpression results in CFTR intracellular retention and lysosomaldegradation in the lysosomes (PubMed:11707463, PubMed:14570915).

Cellular Location

Cytoplasm. Golgi apparatus membrane; Peripheral membrane protein. Golgi apparatus, trans-Golgi network membrane; Peripheral membrane protein Synapse. Postsynaptic density. Cell projection, dendrite. Note=Enriched in synaptosomal and postsynaptic densities (PSD) fractions. Expressed in cell bodies and dendrites of Purkinje cells. Localized at the trans-Golgi network (TGN) of spermatids and the medulla of round spermatides.

Tissue Location

Ubiquitously expressed.

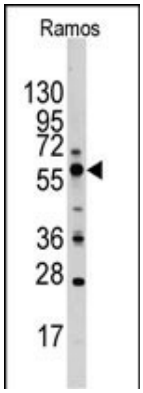
Background

PDZ domains contain approximately 90 amino acids and bind the extreme C terminus of proteins in a sequence-specific manner. PIST, a PDZ domain-containing Golgi protein, was discovered in a yeast two-hybrid system as a binding partner to Beclin-1, a Bcl-2-interacting protein homologous to the yeast autophagy gene apg6. Experiments with mutant PIST proteins lacking the PDZ domain showed that PIST interaction with Beclin-1 through its coiled-coil domain can modulate Beclin-1 activity and suggest that PIST interactions with other proteins through its PDZ domain may regulate the activity of PIST and Beclin-1.

References

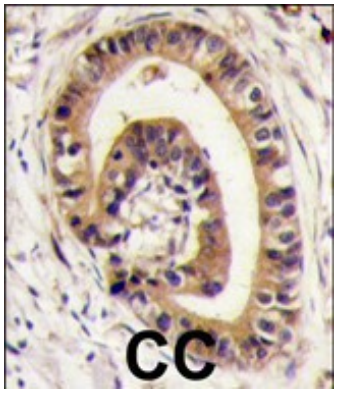
Li,X., Protein Sci. 15 (9), 2149-2158 (2006)
Ito,H., Biochem. J. 397 (3), 389-398 (2006)
Wente,W., J. Biol. Chem. 280 (37), 32419-32425 (2005)

Images



Western blot analysis of PIST Antibody (C-term) (Cat.#AP7262b) in Ramos cell line lysates (35ug/lane). PIST (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human colon carcinoma tissue reacted with PIST antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Citations

- A rapid method to improve protein detection by indirect ELISA.