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

PIST Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7262c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9HD26
Other Accession	Q8BH60
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB13072
Calculated MW	50520
Antigen Region	164-193

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 164-193 amino acids from the Central 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 (Center) 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.

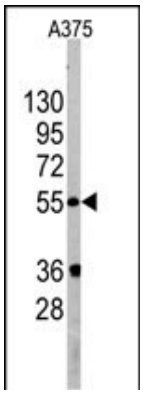
Background

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

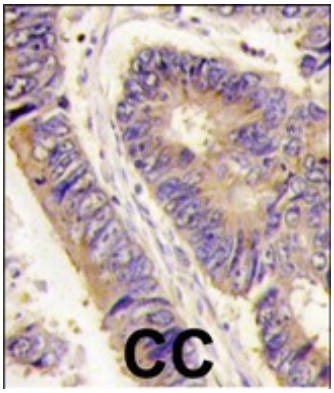
Li,X., Protein Sci. 15 (9), 2149-2158 (2006)
Ito,H., Biochem. J. 397 (3), 389-398 (2006)
Wente,W., J. Biol. Chem. 280 (37), 32419-32425 (2005)

Images



Western blot analysis of PIST Antibody (Center) (Cat.#AP7262c) in A375 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 (Center), 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.



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