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

PIST Antibody

Catalog # ASC10367

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9HD26
Other Accession	AAG00572, 9837431
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	50520
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PIST antibody can be used for the detection of PIST by Western blot at 1 - 4 g/mL. Antibody can also be used for immunohistochemistry starting at 1 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	57120
Other Names	PIST Antibody: CAL, FIG, PIST, GOPC1, dJ94G16.2, CAL, Golgi-associated PDZ and coiled-coil motif-containing protein, CFTR-associated ligand, golgi associated PDZ and coiled-coil motif containing
Target/Specificity	GOPC;
Reconstitution & Storage	PIST antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	PIST Antibody 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.

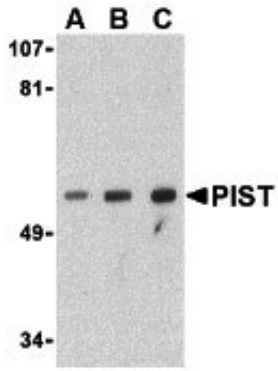
Background

PIST Antibody: Autophagy, the process of bulk degradation of cellular proteins through an autophagosomic-lysosomal pathway is important for normal growth control and may be defective in tumor cells. It is involved in the preservation of cellular nutrients under starvation conditions as well as the normal turnover of cytosolic components and is negatively regulated by TOR (Target of rapamycin). PIST, a PDZ-containing 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

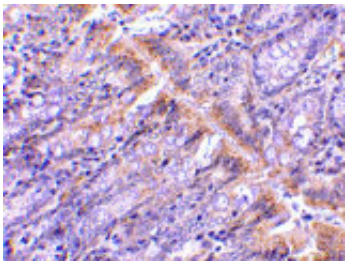
Gozuacik D and Kimchi A. Autophagy as a cell death and tumor suppressor mechanism. Oncogene. 2004; 23:2891-906.
Kisen GO, Tessitore L, Costelli P, et al. Reduced autophagic activity in primary rat hepatocellular carcinoma and ascites hepatoma cells. Carcinogenesis 1993; 14:2501-5.
Kamada Y, Funakoshi T, Shintani T, et al. Tor-mediated induction of autophagy via Apg1 protein kinase complex. J. Cell. Biol. 2000; 150:1507-13.
Yu Z, Horton A, Bravin M, et al. A novel protein complex linking the δ2 glutamate receptor and autophagy: implications for neurodegeneration in Lurcher mice. Neuron 2002; 35:921-33.

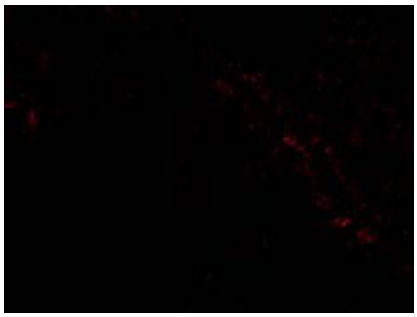
Images



Western blot analysis of PIST in PC-3 cell lysate with PIST antibody at (A) 1, (B) 2 and (C) 4 µg/mL.

Immunohistochemistry of PIST in rat colon tissue with PIST antibody at 1 µg/mL.





Immunofluorescence of PIST in Rat Colon cells with PIST antibody at 20 µg/mL.

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