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PIST Antibody
Catalog # ASC10366

Specification

PIST Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q9HD26
Other Accession	AAG00572, 57120
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**PIST antibody can be used for the detection of PIST by Western blot at 1 - 4 µg/mL. Antibody can also be used for immunohistochemistry starting at 2 µg/mL. For immunofluorescence start at 10 µg/mL.**

PIST Antibody - 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
PIST antibody was raised against a 16 amino acid synthetic peptide from near the carboxy terminus of human PIST.

The immunogen is located within amino acids 360 - 410 of PIST.

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.

PIST Antibody - 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.

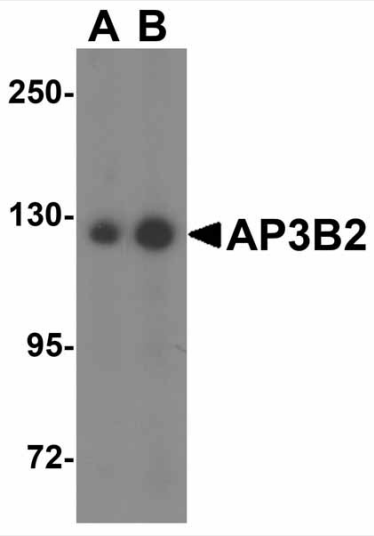
Tissue Location
Ubiquitously expressed.

PIST Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PIST Antibody - Images



Western blot analysis of AP3B2 in rat brain tissue lysate with AP3B2 antibody at (A) 1 and (B) 2 µg/mL.

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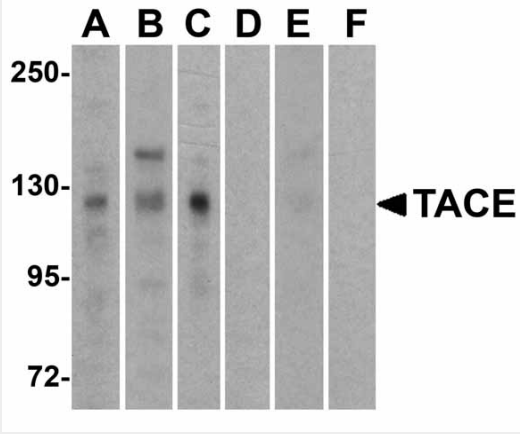

Western blot analysis of TACE in HeLa (A, D), Jurkat (B, E) and Raji (C,F) cell lysate in (A-C) the absence or (D-F) the presence of blocking peptide with TACE antibody at 0.5 µg/mL.

PIST Antibody - 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.

PIST Antibody - 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.
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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.