

PIST (Q-23): sc-130845

BACKGROUND

PIST (PDZ protein interacting specifically with TC10), also known as GOPC (Golgi associated PDZ and coiled-coil motif containing), CAL or FIG, is a 462 amino acid protein that localizes to the cytoplasm, as well as to the membrane of the Golgi apparatus and to the cell junction. Expressed ubiquitously and containing one PDZ (DHR) domain, PIST functions as a homoooligomer that interacts with a variety of proteins and plays a role in intracellular protein trafficking and degradation. Additionally, PIST is thought to regulate ionic currents via membrane channel modification and may also play a role in autophagy. Chromosomal aberrations in the gene encoding PIST are found in glioblastoma multiform (GBM), a common and aggressive form of brain tumor, suggesting a role for mutated PIST in carcinogenesis. Three isoforms of PIST exist due to alternative splicing events.

REFERENCES

1. Yao, R., et al. 2001. Identification of a PDZ domain containing Golgi protein, GOPC, as an interaction partner of frizzled. *Biochem. Biophys. Res. Commun.* 286: 771-778.
2. Cheng, J., et al. 2004. Modulation of mature cystic fibrosis transmembrane regulator protein by the PDZ domain protein CAL. *J. Biol. Chem.* 279: 1892-1898.
3. He, J., et al. 2004. Interaction with cystic fibrosis transmembrane conductance regulator-associated ligand (CAL) inhibits β 1-adrenergic receptor surface expression. *J. Biol. Chem.* 279: 50190-50196.

CHROMOSOMAL LOCATION

Genetic locus: GOPC (human) mapping to 6q22.1.

SOURCE

PIST (Q-23) is a purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of PIST of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PIST (Q-23) is recommended for detection of PIST of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PIST siRNA (h): sc-76148, PIST shRNA Plasmid (h): sc-76148-SH and PIST shRNA (h) Lentiviral Particles: sc-76148-V.

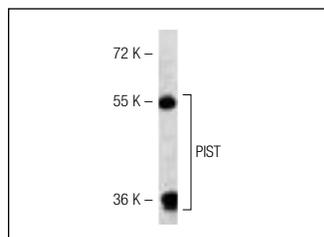
Molecular Weight of PIST isoforms: 60/46/35 kDa.

Positivie Controls: A-375 cell lysate: sc-3811.

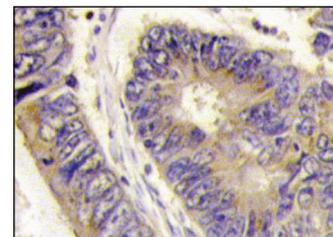
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



PIST (Q-23): sc-130845. Western blot analysis of PIST expression in A-375 whole cell lysate.



PIST (Q-23): sc-130845. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon carcinoma tissue showing cytoplasmic and membrane localization.

SELECT PRODUCT CITATIONS

1. Alshafie, W., et al. 2014. VIP regulates CFTR membrane expression and function in Calu-3 cells by increasing its interaction with NHERF1 and P-ERM in a VPAC1- and PKC ϵ -dependent manner. *Am. J. Physiol., Cell Physiol.* 307: C107-C119.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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Try **PIST (A-7): sc-393026**, our highly recommended monoclonal alternative to PIST (Q-23).