

AP20061PU-N**Polyclonal Antibody to GOPC / PIST (Center) - Aff - Purified****Alternate names:**

CAL, CFTR-associated ligand, FIG, Fused in glioblastoma, Golgi-associated PDZ and coiled-coil motif-containing protein, PDZ protein interacting specifically with TC10

Quantity:

0.1 mg

Background:

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 (1,2) and is negatively regulated by TOR (Target of rapamycin) (3). 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* (4-6). 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. (6)

Uniprot ID:

[Q9HD26](#)

NCBI:

[NP_001017408](#)

GeneID:

[57120](#)

Host / Isotype:

Rabbit / IgG

Immunogen:

17 amino acid peptide from near the center of Human PIST (Genbank accession No. AAG00572).

Format:

State: Liquid purified IgG fraction

Purification: Immunoaffinity Chromatography

Buffer System: PBS containing 0.02% Sodium Azide as preservative

Applications:

ELISA.

Western Blot: PIST antibody can be used for the detection of PIST at 1–2 µg/ml.

Positive Control: PC-3 Cell Lysate.

Immunofluorescence: Start at 20 µg/ml.

Immunohistochemistry on Paraffin Sections.

Positive Control: Rat Colon Cell Lysate.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

Recognizes PIST (Intermediate Domain).

Species Reactivity:

Tested: Human and Mouse.

Storage:

Store the antibody undiluted at 2-8°C.

Antibodies should not be exposed to prolonged high temperatures.

Shelf life: one year from despatch.

General Readings:

1. Gozuacik D, Kimchi A. Autophagy as a cell death and tumor suppressor mechanism. *Oncogene*. 2004 Apr 12;23(16):2891-906. PubMed PMID: 15077152.

2. Kisen GO, Tessitore L, Costelli P, Gordon PB, Schwarze PE, Baccino FM, et al.

Reduced autophagic activity in primary rat hepatocellular carcinoma and ascites hepatoma cells. *Carcinogenesis*. 1993 Dec;14(12):2501-5. PubMed PMID: 8269618.

3. 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.

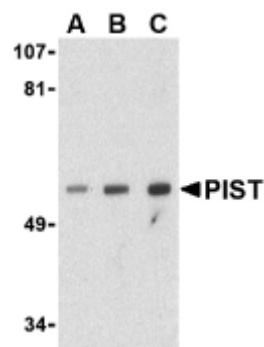
4. Yue Z, Horton A, Bravin M, DeJager PL, Selimi F, Heintz N. A novel protein complex linking the delta 2 glutamate receptor and autophagy: implications for neurodegeneration in lurcher mice. *Neuron*. 2002 Aug 29;35(5):921-33. PubMed PMID: 12372286.

5. Liang XH, Kleeman LK, Jiang HH, Gordon G, Goldman JE, Berry G, et al. Protection against fatal Sindbis virus encephalitis by beclin, a novel Bcl-2-interacting protein. *J Virol*. 1998 Nov;72(11):8586-96. PubMed PMID: 9765397.

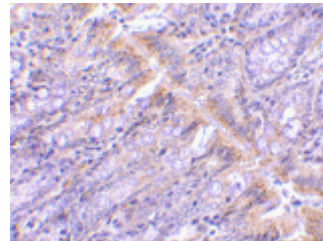
6. Kametaka S, Okano T, Ohsumi M, Ohsumi Y. Apg14p and Apg6/Vps30p form a protein complex essential for autophagy in the yeast, *Saccharomyces cerevisiae*. *J Biol Chem*. 1998 Aug 28;273(35):22284-91. PubMed PMID: 9712845.

Pictures:

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



Immunohistochemistry of PIST in rat colon tissue with PIST antibody at 1 ug/ml.



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

