

Product name:	PTN13 Rabbit Polyclonal Antibody
Cat number:	ABN16656
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from part region of human protein
Reactivity:	Human,Rat,Mouse
Applications:	IHC 1:50-1:300,ICC/IF 1:50-1:200
Molecular Weight:	273kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP is a large intracellular protein. It has a catalytic PTP domain at its C-terminus and two major structural domains: a region with five PDZ domains and a FERM domain that binds to plasma membrane and cytoskeletal elements. This PTP was found to interact with, and dephosphorylate, Fas receptor and IkappaBalpha through the PDZ domains. This suggests it has a role in Fas mediated programmed cell death. This PTP was also shown to interact with GTPase-activating protein, and thus may function as a regulator of Rho signaling pathways. Four alternatively spliced transcript variants, which encode distinct proteins, have catalytic activity: Protein tyrosine phosphate + H₂O = protein tyrosine + phosphate. **function:**Regulates negatively FAS-induced apoptosis and NGFR-mediated pro-apoptotic signaling. **sequence caution:**Contaminating sequence. Potential poly-A sequence. **similarity:**Belongs to the protein-tyrosine phosphatase family. Non-receptor class subfamily. **similarity:**Contains 1 FERM domain. **similarity:**Contains 1 KIND domain. **similarity:**Contains 1 tyrosine-protein phosphatase domain. **similarity:**Contains 3 PDZ (DHR) domains. **similarity:**Contains 4 PDZ (DHR) domains. **similarity:**Contains 5 PDZ (DHR) domains. **subunit:**Interacts with TRIP6 and TNFRSF6 (Fas receptor) through its second PDZ domain. Interacts with the C-terminal SVP motif of NGFR through its third PDZ domain. Interacts with the LIM domain of PDLIM4 through its second and fourth PDZ domains. Binds PLEKHA1 and PLEKHA2 through its first PDZ domain. Interacts with BRD7 and ARHGAP29. **tissue specificity:**Present in most tissues with the exception of the liver and skeletal muscle. Most abundant in lung, kidney and fetal brain.