

Product name:	PTG Rabbit Polyclonal Antibody
Cat number:	ABN16642
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human PPP1R3C. AA range:44-93
Reactivity:	Human,Monkey
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	36kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA 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:

This gene encodes a carbohydrate binding protein that is a subunit of the protein phosphatase 1 (PP1) complex. PP1 catalyzes reversible protein phosphorylation, which is important in a wide range of cellular activities. The encoded protein affects glycogen biosynthesis by activating glycogen synthase and limiting glycogen breakdown by reducing glycogen phosphorylase activity. DNA hypermethylation of this gene has been found in colorectal cancer patients. The encoded protein also interacts with the laforin protein, which is a protein tyrosine phosphatase implicated in Lafora disease. [provided by RefSeq, Sep 2016],domain:The N-terminal region is required for binding to PP1, the central region is required for binding to glycogen and the C-terminal region is required for binding to glycogen phosphorylase, glycogen synthase and phosphorylase kinase.,function:Acts as a glycogen-targeting subunit for PP1 and regulates its activity. Activates glycogen synthase, reduces glycogen phosphorylase activity and limits glycogen breakdown. Dramatically increases basal and insulin-stimulated glycogen synthesis upon overexpression in a variety of cell types.,similarity:Contains 1 CBM21 (carbohydrate binding type-21) domain.,subunit:Interacts with PPP1CC catalytic subunit of PP1 and associates with glycogen. Forms complexes with glycogen phosphorylase, glycogen synthase and phosphorylase kinase which is necessary for its regulation of PP1 activity. Also interacts with EPM2A/laforin.,