
Product Name: PTG Rabbit Polyclonal Antibody**Catalog #: APRab16642**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Monkey
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	36kDa

Antigen Information

Gene Name	PPP1R3C
Alternative Names	PPP1R3C; PPP1R5; Protein phosphatase 1 regulatory subunit 3C; Protein phosphatase 1 regulatory subunit 5; PP1 subunit R5; Protein targeting to glycogen; PTG
Gene ID	5507.0
SwissProt ID	Q9UQK1
Immunogen	The antiserum was produced against synthesized peptide derived from human PPP1R3C. AA range:44-93

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.

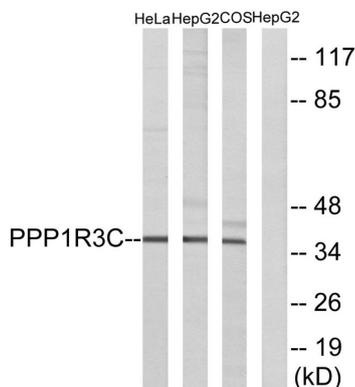
similarity:Contains 1 CBM21 (carbohydrate binding type-21) domain.

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.

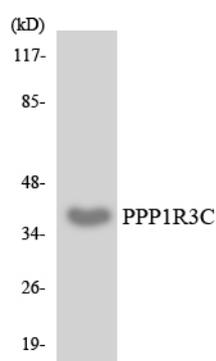
Research Area

Insulin_Receptor;

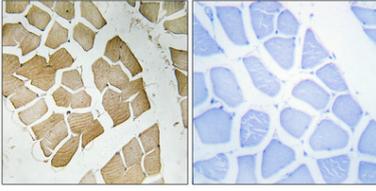
Image Data



Western blot analysis of lysates from HepG2, HeLa, and COS7 cells, using PPP1R3C Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HeLa cells using PPP1R3C antibody.



Immunohistochemical analysis of paraffin-embedded Human skeletal muscle. Antibody was diluted at 1:100 (4°,overnight) . High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.