

Product name:	PPP1R3A Rabbit Polyclonal Antibody
Cat number:	ABN16428
Conjugate:	Unconjugated
Size:	100μL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human PPP1R3A. AA range:647-696
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,IHC 1:50-1:300
Molecular Weight:	140kDa
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:

The glycogen-associated form of protein phosphatase-1 (PP1) derived from skeletal muscle is a heterodimer composed of a 37-kD catalytic subunit and a 124-kD targeting and regulatory subunit. This gene encodes the regulatory subunit which binds to muscle glycogen with high affinity, thereby enhancing dephosphorylation of glycogen-bound substrates for PP1 such as glycogen synthase and glycogen phosphorylase kinase. [provided by RefSeq, Jul 2008],disease:Defects in PPP1R3A are a cause of insulin resistance (Ins resistance).,disease:Defects in PPP1R3A are a cause of susceptibility to noninsulin-dependent diabetes mellitus (NIDDM) [MIM:125853]; also known as diabetes mellitus type II. NIDDM is characterized by an autosomal dominant mode of inheritance, onset during adulthood and insulin resistance.,domain:The CBM21 domain is known to be involved in the localization to glycogen and is characteristic of some regulatory subunit of phosphatase complexes.,function:Seems to act as a glycogen-targeting subunit for PP1. PP1 is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Plays an important role in glycogen synthesis but is not essential for insulin activation of glycogen synthase.,PTM:Phosphorylation at Ser-46 by ISPK stimulates the dephosphorylation of glycogen synthase and phosphorylase kinase.,similarity:Contains 1 CBM21 (carbohydrate binding type-21) domain.,subunit:Interacts with PPP1CC catalytic subunit of PP1, and associates with glycogen.,tissue specificity:Skeletal muscle and heart.,