

# PPP2R4 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21983a

## **Product Information**

Application	WB, E
Primary Accession	<u>Q15257</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB54602
Calculated MW	40668

# **Additional Information**

Gene ID	5524
Other Names	Serine/threonine-protein phosphatase 2A activator, 5.2.1.8, PP2A, subunit B', PR53 isoform, Phosphotyrosyl phosphatase activator, PTPA, Serine/threonine-protein phosphatase 2A regulatory subunit 4, Serine/threonine-protein phosphatase 2A regulatory subunit B', PPP2R4, PTPA
Target/Specificity	This PPP2R4 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 3-35 amino acids from human PPP2R4.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PPP2R4 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name	PTPA ( <u>HGNC:9308</u> )
Synonyms	PPP2R4
Function	PPIases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides (By similarity).

	Acts as a regulatory subunit for serine/threonine-protein phosphatase 2A (PP2A) (PubMed: <u>16916641</u> , PubMed: <u>36073231</u> ). Modulates PP2A activity or substrate specificity, probably by inducing a conformational change in the catalytic subunit, a proposed direct target of the PPIase (PubMed: <u>16916641</u> ). Can reactivate inactive phosphatase PP2A-phosphatase methylesterase complexes (PP2A(i)) in presence of ATP and Mg(2+) (By similarity). Reversibly stimulates the variable phosphotyrosyl phosphatase activity of PP2A core heterodimer PP2A(D) in presence of ATP and Mg(2+) (in vitro) (PubMed: <u>16916641</u> ). The phosphotyrosyl phosphatase activity is dependent of an ATPase activity of the PP2A(D):PP2R4 complex (PubMed: <u>16916641</u> ). Is involved in apoptosis; the function appears to be independent from PP2A (PubMed: <u>1733320</u> ).
Cellular Location	Cytoplasm. Nucleus
Tissue Location	Widely expressed.

#### Background

PPIases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides. Acts as a regulatory subunit for serine/threonine- protein phosphatase 2A (PP2A) modulating its activity or substrate specificity, probably by inducing a conformational change in the catalytic subunit, a proposed direct target of the PPIase. Can reactivate inactive phosphatase PP2A-phosphatase methylesterase complexes (PP2A(i)) in presence of ATP and Mg(2+) (By similarity). Reversibly stimulates the variable phosphotyrosyl phosphatase activity of PP2A core heterodimer PP2A(D) in presence of ATP and Mg(2+) (in vitro). The phosphotyrosyl phosphatase activity is dependent of an ATPase activity of the PP2A(D):PPP2R4 complex. Is involved in apoptosis; the function appears to be independent from PP2A.

### References

Cayla X.,et al.J. Biol. Chem. 269:15668-15675(1994). Van Hoof C.,et al.Genomics 28:261-272(1995). Janssens V.,et al.Eur. J. Biochem. 267:4406-4413(2000). Ota T.,et al.Nat. Genet. 36:40-45(2004). Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.

#### Images



All lanes : Anti-PPP2R4 Antibody (N-Term) at 1:2000 dilution Lane 1: BA/F3 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: K562 whole cell lysate Lane 4: MCF-7 whole cell lysate Lane 5: Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.