

PPP2R4 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21983a

Specification

PPP2R4 Antibody (N-Term) - Product Information

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

PPP2R4 Antibody (N-Term) - 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.

PPP2R4 Antibody (N-Term) - Protein Information

Name PTPA (<u>HGNC:9308</u>)

Synonyms PPP2R4



Function PPlases 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 PPlase (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):PPP2R4 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.

PPP2R4 Antibody (N-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PPP2R4 Antibody (N-Term) - 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 μ g 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.

PPP2R4 Antibody (N-Term) - Background

PPlases 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 PPlase. 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.

PPP2R4 Antibody (N-Term) - 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.