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PPP2R4 Blocking Peptide (N-Term)

Synthetic peptide
Catalog # BP21983a

Specification

PPP2R4 Blocking Peptide (N-Term) - Product Information

Primary Accession Q15257

PPP2R4 Blocking Peptide (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
The synthetic peptide sequence is selected from aa 3-15 of HUMAN PPP2R4

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PPP2R4 Blocking Peptide (N-Term) - Protein Information

Name PTPA (HGNC:9308)

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:16916641, PubMed:36073231). Modulates PP2A activity or substrate specificity, probably by inducing a conformational change in the catalytic subunit, a proposed direct target of the PPIase (PubMed:16916641). 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:16916641). The phosphotyrosyl phosphatase activity is dependent of an ATPase activity of the PP2A(D):PPP2R4 complex (PubMed:16916641). Is involved in apoptosis; the function appears to be independent from PP2A (PubMed:17333320).

Cellular Location
Cytoplasm. Nucleus

Tissue Location
Widely expressed.

PPP2R4 Blocking Peptide (N-Term) - Protocols

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

- Blocking Peptides

PPP2R4 Blocking Peptide (N-Term) - Images

PPP2R4 Blocking Peptide (N-Term) - 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.

PPP2R4 Blocking Peptide (N-Term) - References

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Janssens V.,et al.Eur. J. Biochem. 267:4406-4413(2000).
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