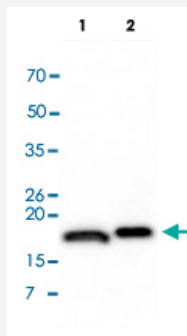


PPP1R14A monoclonal antibody, clone 4H10

Catalog # MAB2039

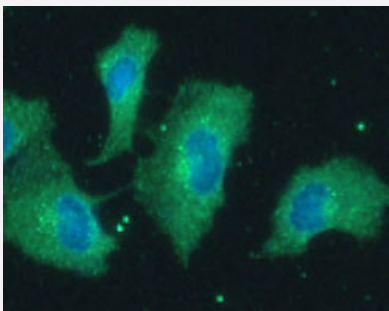
Size 100 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of Lane 1: A549 cell lysate, Lane 2. : NIH-3T3 cell lysate.



Immunofluorescence

Immunofluorescence analysis of A-549 cells. The cell was stained with PPP1R14A monoclonal antibody, clone 4H10 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

Specification

Product Description	Mouse monoclonal antibody raised against partial recombinant PPP1R14A.
Immunogen	Recombinant protein corresponding to amino acids 1-147 of human PPP1R14A.
Host	Mouse
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Isotype	IgG2a, kappa

Quality Control Testing	Antibody Reactive Against Recombinant Protein.
Recommend Usage	ELISA Immunocytochemistry Immunofluorescence Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of Lane 1: A549 cell lysate, Lane 2. : NIH-3T3 cell lysate.

- Immunocytochemistry

- Immunofluorescence

Immunofluorescence analysis of A-549 cells. The cell was stained with PPP1R14A monoclonal antibody, clone 4H10 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PPP1R14A

Entrez GeneID	94274
Protein Accession#	NP_150281
Gene Name	PPP1R14A
Gene Alias	CPI-17, CPI17, PPP1INL
Gene Description	protein phosphatase 1, regulatory (inhibitor) subunit 14A
Omim ID	608153
Gene Ontology	Hyperlink

Gene Summary

PPP1R14A is a phosphorylation-dependent inhibitor of smooth muscle myosin phosphatase (see MIM 603768). Inhibition leads to increased myosin phosphorylation and enhances smooth muscle contraction in the absence of increased intracellular Ca^{2+} concentration.[supplied by OMIM]

Other Designations

17-KDa protein|17-kDa PKC-potentiated inhibitory protein of PP1|PKC-potentiated inhibitory protein of PP1

Publication Reference

- [Up-regulation of myometrial RHO effector proteins \(PKN1 and DIAPH1\) and CPI-17 \(PPP1R14A\) phosphorylation in human pregnancy is associated with increased GTP-RHOA in spontaneous preterm labor.](#)

Lartey J, Smith M, Pawade J, Strachan B, Mellor H, Lopez Bernal A.
Biology of Reproduction 2007 Jun; 76(6):971.

Application: WB-Ce, Human, myometrial cells
- [Phosphorylation of CPI-17, an inhibitor of myosin phosphatase, by protein kinase N.](#)

Hamaguchi T, Ito M, Feng J, Seko T, Koyama M, Machida H, Takase K, Amano M, Kaibuchi K, Hartshorne DJ, Nakano T.
Biochemical and Biophysical Research Communications 2000 Aug; 274(3):825.

Application: WB-Re, Recombinant protein
- [Molecular cloning of a novel phosphorylation-dependent inhibitory protein of protein phosphatase-1 \(CPI17\) in smooth muscle: its specific localization in smooth muscle.](#)

Eto M, Senba S, Morita F, Yazawa M.
FEBS Letters 1997 Jun; 410(2-3):356.

Pathway

- [Vascular smooth muscle contraction](#)