

### PPP1R14A Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant PPP1R14A. Catalog # AT3408a

#### Specification

#### PPP1R14A Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, E <u>O96A00</u> <u>BC021089</u> Human mouse Monoclonal IgG1 Kappa 16693

### PPP1R14A Antibody (monoclonal) (M01) - Additional Information

Gene ID 94274

**Other Names** Protein phosphatase 1 regulatory subunit 14A, 17 kDa PKC-potentiated inhibitory protein of PP1, Protein kinase C-potentiated inhibitor protein of 17 kDa, CPI-17, PPP1R14A, CPI17, PPP1INL

**Target/Specificity** PPP1R14A (AAH21089, 1 a.a.  $\sim$  147 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000 E~~N/A

Format Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** PPP1R14A Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

#### PPP1R14A Antibody (monoclonal) (M01) - Protocols

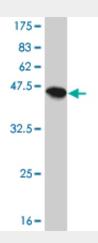
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides

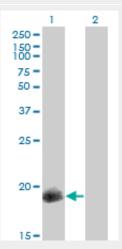


- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PPP1R14A Antibody (monoclonal) (M01) - Images



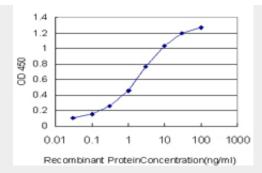
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (41.91 KDa).



Western Blot analysis of PPP1R14A expression in transfected 293T cell line by PPP1R14A monoclonal antibody (M01), clone 3A7.

Lane 1: PPP1R14A transfected lysate(16.7 KDa). Lane 2: Non-transfected lysate.





Detection limit for recombinant GST tagged PPP1R14A is approximately 0.1ng/ml as a capture antibody.

# PPP1R14A Antibody (monoclonal) (M01) - Background

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.

## PPP1R14A Antibody (monoclonal) (M01) - References

Genome-wide association and replication studies identify four variants associated with prostate cancer susceptibility. Gudmundsson J, et al. Nat Genet, 2009 Oct. PMID 19767754.Functional inactivation of NF2/merlin in human mesothelioma. Thurneysen C, et al. Lung Cancer, 2009 May. PMID 18835652.CPI-17 silencing-reduced responsiveness in control and TNF-alpha-treated human bronchi. Morin C, et al. Am J Respir Cell Mol Biol, 2008 Dec. PMID 18757304.Protein microarray analysis identifies human cellular prion protein interactors. Satoh J, et al. Neuropathol Appl Neurobiol, 2009 Feb. PMID 18482256.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, et al. Biol Reprod, 2007 Jun. PMID 17301291.