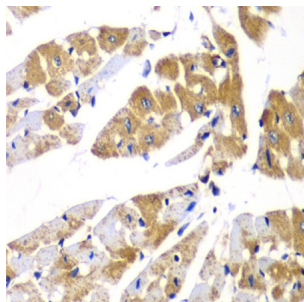


Protein Phosphatase 1 Regulatory Subunit 12A (PPP1R12A) Antibody

Catalogue No.: abx005139



Immunohistochemistry of paraffin-embedded Mouse heart using PPP1R12A Antibody (1/100 dilution, 40x lens).

PPP1R12A Antibody is a Rabbit Polyclonal antibody against PPP1R12A. Myosin phosphatase target subunit 1, which is also called the myosin-binding subunit of myosin phosphatase, is one of the subunits of myosin phosphatase. Myosin phosphatase regulates the interaction of actin and myosin downstream of the guanosine triphosphatase Rho. The small guanosine triphosphatase Rho is implicated in myosin light chain (MLC) phosphorylation, which results in contraction of smooth muscle and interaction of actin and myosin in nonmuscle cells. The guanosine triphosphate (GTP)-bound, active form of RhoA (GTP.RhoA) specifically interacted with the myosin-binding subunit (MBS) of myosin phosphatase, which regulates the extent of phosphorylation of MLC. Rho-associated kinase (Rho-kinase), which is activated by GTP. RhoA, phosphorylated MBS and consequently inactivated myosin phosphatase. Overexpression of RhoA or activated RhoA in NIH 3T3 cells increased phosphorylation of MBS and MLC. Thus, Rho appears to inhibit myosin phosphatase through the action of Rho-kinase. Several transcript variants encoding different isoforms have been found for this gene.

Target: Protein Phosphatase 1 Regulatory Subunit 12A (PPP1R12A)

Clonality: Polyclonal

Reactivity: Human, Mouse, Rat

Tested Applications: IHC

Host: Rabbit

Recommended dilutions: IHC-P: 1/50 - 1/200. Not tested in IHC-F. Optimal dilutions/concentrations should be determined by the end user.

Conjugation: Unconjugated

Immunogen: Recombinant fusion protein corresponding to human PPP1R12A

Isotype: IgG

Form: Liquid

Purification: Purified by affinity chromatography.

Datasheet

Version: 7.0.0

Revision date: 13 Aug 2025



Storage: Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

UniProt Primary AC: O14974 ([UniProt](#), [ExPASy](#))

Gene Symbol: PPP1R12A

GeneID: [4659](#)

NCBI Accession: NP_002471.1

KEGG: hsa:4659

String: [9606.ENSP00000389168](#)

Buffer: PBS, pH 7.3, containing 0.02% sodium azide, 50% glycerol.

Concentration: 1 mg/ml

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

For Reference Only