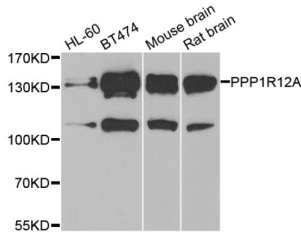
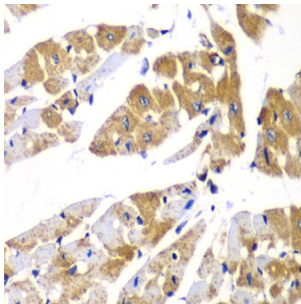


## Protein Phosphatase 1 Regulatory Subunit 12A (PPP1R12A) Antibody

Catalogue No.: abx005139



Western blot analysis of extracts of various cell lines, using PPP1R12A antibody (abx005139) at 1/1000 dilution.



Immunohistochemistry of paraffin-embedded mouse heart using PPP1R12A Antibody (abx005139) at dilution of 1/100 (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:** WB, IHC

**Host:** Rabbit

**Recommended dilutions:** WB: 1/500 - 1/2000, IHC-P: 1/50 - 1/200. Not tested in IHC-F. Optimal dilutions/concentrations should be determined by the end user.

**Conjugation:** Unconjugated

# Datasheet

Version: 5.0.0  
Revision date: 15 Nov 2024



<b>Immunogen:</b>	Recombinant fusion protein containing a sequence corresponding to amino acids 710-970 of human PPP1R12A.
<b>Isotype:</b>	IgG
<b>Form:</b>	Liquid
<b>Purification:</b>	Purified by affinity chromatography.
<b>Storage:</b>	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
<b>UniProt Primary AC:</b>	O14974 ( <a href="#">UniProt</a> , <a href="#">ExPASy</a> )
<b>Gene Symbol:</b>	PPP1R12A
<b>GeneID:</b>	<a href="#">4659</a>
<b>NCBI Accession:</b>	NP_002471.1
<b>KEGG:</b>	hsa:4659
<b>String:</b>	<a href="#">9606.ENSP00000389168</a>
<b>Molecular Weight:</b>	Calculated MW: 115 kDa Observed MW: 130 kDa
<b>Buffer:</b>	PBS, pH 7.3, containing 0.02% sodium azide, 50% glycerol.
<b>Concentration:</b>	> 0.2 mg/ml
<b>Note:</b>	This product is for research use only.

For Reference Only