

Datasheet for ABIN6136196
anti-PPP1R12A antibody (pSer507)



[Go to Product page](#)

1 Image

Overview

Quantity:	100 µL
Target:	PPP1R12A
Binding Specificity:	pSer507
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PPP1R12A antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	A synthetic phosphorylated peptide around S507 of human PPP1R12A (NP_001137357.1).
Sequence:	LASTS
Isotype:	IgG
Cross-Reactivity:	Human
Characteristics:	Phosphorylated Antibodies

Target Details

Target:	PPP1R12A
Alternative Name:	PPP1R12A (PPP1R12A Products)
Background:	Myosin phosphatase target subunit 1, which is also called the myosin-binding subunit of

Target Details

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.,PPP1R12A,M130,MBS,MYPT1,MYPT1,Epigenetics & Nuclear Signaling,Signal Transduction,Kinase,Serine/threonine kinases,Cell Biology & Developmental Biology,Cell Cycle,Cytoskeleton,Motor Proteins,Actins,Protein phosphorylation,PPP1R12A

Molecular Weight: 105 kDa/109 kDa/111 kDa/115 kDa

Gene ID: 4659

UniProt: [O14974](#)

Pathways: [M Phase](#)

Application Details

Application Notes: WB,1:500 - 1:2000

Restrictions: For Research Use only

Handling

Format: Liquid

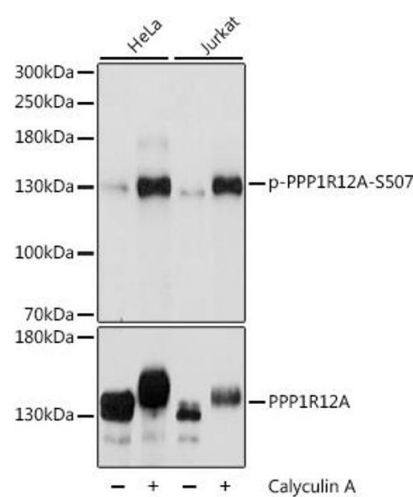
Buffer: PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20°C. Avoid freeze / thaw cycles.



Western Blotting

Image 1. Western blot analysis of extracts of various cell lines, using Phospho-PPP1R12A-S507 antibody (ABIN6135287, ABIN6136196, ABIN6136197 and ABIN6225664) at 1:2000 dilution or PPP1R12A antibody (ABIN6128260, ABIN6146059, ABIN6146061 and ABIN6213896). HeLa cells were treated by Calyculin A (100 nM) at 37 °C for 30 minutes after serum-starvation overnight. Jurkat cells were treated by Calyculin A (100 nM) at 37 °C for 30 minutes. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3 % BSA. Detection: ECL Basic Kit (RM00020). Exposure time: 1 s.