

## Phospho-PPP1R12A-S507 Antibody Kit

<b>Catalog No.</b>	RK04097	<b>Category</b>	Antibody Kit
<b>Applications</b>	WB	<b>Observed MW</b>	135kDa
<b>Cross-reactivity</b>	Human, Mouse	<b>Calculated MW</b>	105kDa/109kDa/111kDa/115kDa

### Immunogen Information

**Immunogen** A synthetic phosphorylated peptide around S507 of human PPP1R12A (NP\_001137357.1).  
Recombinant fusion protein containing a sequence corresponding to amino acids 1-200 of human PPP1R12A (NP\_002471.1).

**Gene ID** 4659  
**Swiss prot** O14974  
**Synonyms** M130;MBS;MYPT1

### Product information

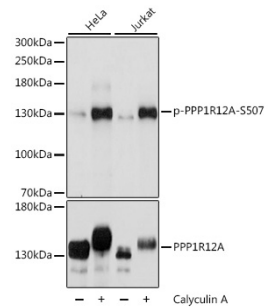
**Source** Rabbit  
**Isotype** IgG  
**Purification method** Affinity purification  
**Storage** Store at -20°C. Avoid freeze/ thaw cycles.  
Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

### Background

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.

### Recommended Dilutions

WB 1:500 -  
1:2000



Western blot - Phospho-PPP1R12A-S507 pAb (AP0769)