# Anti-Phospho-MYPT1 (Ser668) Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P108436

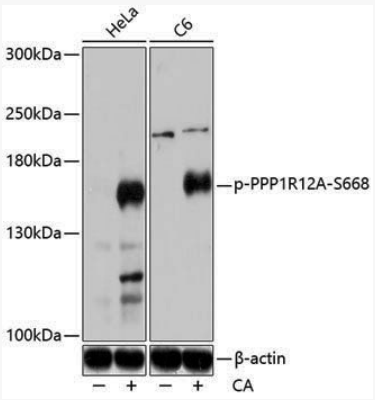
## Product Information

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| Application | WB, ELISA |
| Reactivity | Human, Mouse, Rat |
| Dilution | WB 1:500~1:2000 |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | A synthetic phosphorylated peptide around S668 of human PPP1R12A (NP_001137357.1). |
| Format | Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | Anti-Phospho-MYPT1 (Ser668) Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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|---|---|
| Synonyms | MBS; GUBS; M130; MYPT1; Phospho-PPP1R12A-S668. |
| Calculated MW | Calculated MW: 115 kDa; Observed MW: 160 kDa |
| Uniprot ID | O14974 |
| Gene ID | 4659 |
| 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. |

## Validation Images




Western blot analysis of various lysates using Phospho-PPP1R12A-S668 Rabbit pAb (P108436) at 1:2,000 dilution. Both HeLa cells and C6 cells were treated by Calyculin A (100 nM) at 37°C for 30 minutes after serum-starvation overnight.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% BSA.
Detection: ECL Kit.
Exposure time: 180s.