



## MYPT1 (phospho Thr853) rabbit pAb

**Cat#: orb769198 (Manual)** 

For research use only. Not intended for diagnostic use.

Product Name MYPT1 (phospho Thr853) rabbit pAb

Host species Rabbit

Applications IF;WB;IHC;ELISA

Species Cross-Reactivity Human; Mouse; Rat

**Recommended dilutions** IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 -

1/300. ELISA: 1/5000. Not yet tested in other applications.

Immunogen The antiserum was produced against synthesized peptide derived from

human MYPT1 around the phosphorylation site of Thr853. AA range:621-

670

Specificity Phospho-MYPT1 (T853) Polyclonal Antibody detects endogenous levels of

MYPT1 protein only when phosphorylated at T853.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium

azide..

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name Protein phosphatase 1 regulatory subunit 12A

Gene Name PPP1R12A

Cellular localization Cytoplasm. Cytoplasm, cytoskeleton, stress fiber. Also along actomyosin

filaments. .

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Clonality** Polyclonal





Concentration 1 mg/ml

**Observed band** 130kD

**Human Gene ID** 4659

**Human Swiss-Prot Number** O14974

PPP1R12A; MBS; MYPT1; Protein phosphatase 1 regulatory subunit 12A; Myosin phosphatase-targeting subunit 1; Myosin phosphatase target subunit **Alternative Names** 

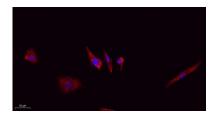
1; Protein phosphatase myosin-binding subunit

Myosin phosphatase target subunit 1, which is also called the myosin-binding **Background** 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

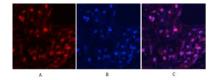
or activated RhoA in NIH 3T3 cells increased phosph



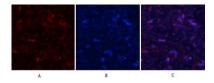
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



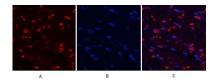




Immunofluorescence analysis of human-lung tissue. 1,MYPT1 (phospho Thr853) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of human-lung tissue. 1,MYPT1 (phospho Thr853) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of rat-heart tissue. 1,MYPT1 (phospho Thr853) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B