

MYPT1/2 (Phospho Ser668/Ser618) Rabbit pAb

Catalog No: YP1819

Reactivity: Human; Mouse; Rat

Applications: IHC;WB

Target: MYPT1

Fields: >>cGMP-PKG signaling pathway;>>cAMP signaling pathway;>>Vascular

smooth muscle contraction;>>Focal adhesion;>>Platelet activation;>>Regulation of actin cytoskeleton;>>Oxytocin signaling pathway;>>Proteoglycans in cancer

Gene Name: PPP1R12A MBS MYPT1 MYPT2

Protein Name: Protein phosphatase 1 regulatory subunit 12A (Myosin phosphatase-targeting

subunit 1) (Myosin phosphatase target subunit 1) (Protein phosphatase myosin-

binding subunit)

O14974

Q9DBR7

Sequence: O14974/O60237

Human Gene Id: 4659

Human Swiss Prot

No:

Mouse Gene ld: 17931

Mouse Swiss Prot

No:

Rat Gene Id: 116670

Rat Swiss Prot No: Q10728

Immunogen: Synthesized peptide derived from human MYPT1/2 (Phospho Ser668/Ser618)

Specificity: This antibody detects endogenous levels of MYPT1/2 (Phospho

Ser668/Ser618) Rabbit pAb at Human, Mouse, Rat

Formulation : Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.



Source : Rabbit,polyclonal

Dilution: WB 1:500-2000 IHC 1:50-200

Purification: The antibody was affinity-purified from rabbit serum by affinity-chromatography

using specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 130kD

Background: protein phosphatase 1 regulatory subunit 12A(PPP1R12A) Homo sapiens

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 phosph

Function: function:Regulates myosin phosphatase activity.,PTM:Phosphorylated by CIT

(Rho-associated kinase) (By similarity). Phosphorylated cooperatively by ROCK1 and CDC42BP on Thr-696. Phosphorylated on upon DNA damage, probably by ATM or ATR.,sequence caution:Contaminating sequence. Potential poly-A sequence.,similarity:Contains 6 ANK repeats.,subcellular location:Along actomyosin filaments and stress fibers.,subunit:PP1 comprises a catalytic subunit, PPP1CA, PPP1CB or PPP1CC, and one or several targeting or

regulatory subunits. PPP1R12A mediates binding to myosin. Interacts with ARHA

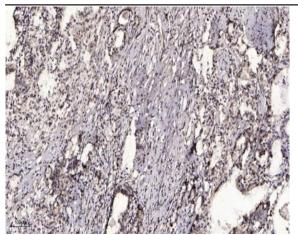
and CIT (By similarity). Binds PPP1R12B, ROCK1 and IL16.,

Subcellular Cytoplasm . Cytoplasm , cytoskeleton , stress fiber . Also along actomyosin

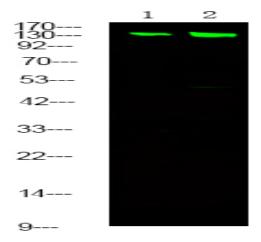
Location: filaments...

Expression: Expressed in striated muscles, specifically in type 2a fibers (at protein level).

Products Images



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).



Western Blot analysis of 1 HeLa cell, 2 Serum-free treated ,using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000