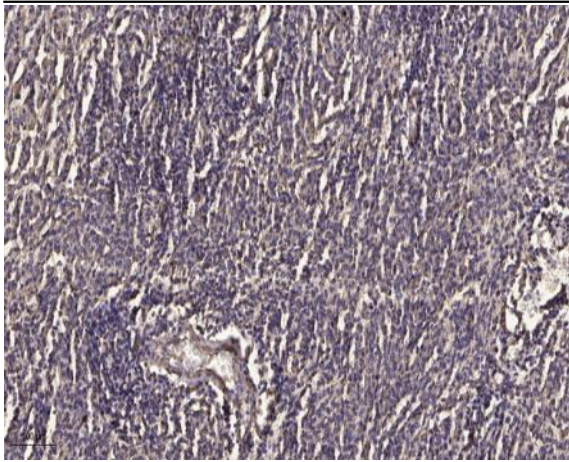


MYPT1 (Phospho Ser507) rabbit pAb

Catalog No :	YP1412
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC
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
Protein Name :	MYPT1 (Ser507)
Human Gene Id :	4659
Human Swiss Prot No :	O14974
Mouse Gene Id :	17931
Mouse Swiss Prot No :	Q9DBR7
Rat Gene Id :	116670
Rat Swiss Prot No :	Q10728
Immunogen :	Synthesized phospho peptide around human MYPT1 (Ser507)
Specificity :	This antibody detects endogenous levels of Human Mouse Rat MYPT1 (phospho-Ser507)
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000;IHC 1:50-300

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
Cell Pathway :	Vascular smooth muscle contraction;Focal adhesion;Long-term potentiation;Regulates Actin and Cytoskeleton;
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 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 Location :	Cytoplasm . Cytoplasm, cytoskeleton, stress fiber . Also along actomyosin filaments. .
Expression :	Expressed in striated muscles, specifically in type 2a fibers (at protein level).

Products Images



Immunohistochemical analysis of paraffin-embedded human meningioma. 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).