

MYPT1 (phospho Thr696) rabbit pAb**Cat#: orb769199 (Manual)**

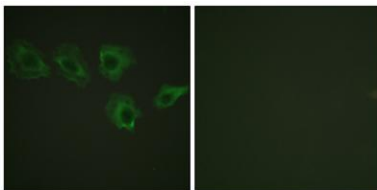
For research use only. Not intended for diagnostic use.

Product Name	MYPT1 (phospho Thr696) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human MYPT1 around the phosphorylation site of Thr696. AA range:661-710
Specificity	Phospho-MYPT1 (T696) Polyclonal Antibody detects endogenous levels of MYPT1 protein only when phosphorylated at T696.
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

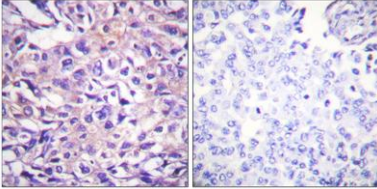
Concentration	1 mg/ml
Observed band	
Human Gene ID	4659
Human Swiss-Prot Number	O14974
Alternative Names	PPP1R12A; MBS; MYPT1; Protein phosphatase 1 regulatory subunit 12A; Myosin phosphatase-targeting subunit 1; Myosin phosphatase target subunit 1; Protein phosphatase myosin-binding subunit

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



Immunofluorescence analysis of A549 cells, using MYPT1 (Phospho-Thr696) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MYPT1 (Phospho-Thr696) Antibody. The picture on the right is blocked with the phospho peptide.