

## MYPT1 Polyclonal Antibody

### Description

<b>Product type</b>	Primary Antibody
<b>Code</b>	BT-AP05740
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Size</b>	20ul, 50ul, 100ul
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human MYPT1. AA range:621-670
<b>Mol wt</b>	115281
<b>Species reactivity</b>	Human, Mouse, Rat
<b>Clonality</b>	Polyclonal
<b>Recommended application</b>	WB, IHC-p, ELISA
<b>Concentration</b>	1 mg/ml
<b>Full name</b>	MYPT1 Antibody
<b>Synonyms</b>	PPP1R12A; MBS; MYPT1; Protein phosphatase 1 regulatory subunit 12A; Myosin phosphatase-targeting subunit 1; Myosin phosphatase target subunit 1; Protein phosphatase myosin-binding subunit

**This product is for research use only, not for use in human, therapeutic or diagnostic procedure.**

### 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. hoA) 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.

### Recommended Dilution

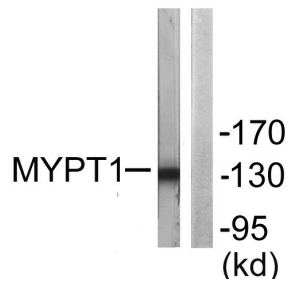
WB: 1: 500 - 1: 2000

IHC: 1: 100 - 1: 300

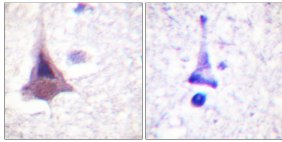
ELISA: 1: 5000

Not yet tested in other applications.

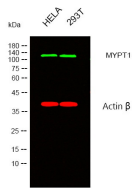
### Images



Western blot analysis of lysates from NIH/3T3 cells, using MYPT1 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using MYPT1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa,293T cells, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody was diluted at 1:10000, 37° 1hour. (Red) loading control antibody was diluted at 1:5000 as loading control, 4° over night, secondary antibody was diluted at 1:10000, 37° 1hour.

### Storage

-20°C for one year

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