



Anti-MYPT1 (phospho S445 aa 437-452) polyclonal antibody (CABT-BL6360)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	detects MYPT1 at ~130 kDa
Immunogen	mouse MYPT1 (residues 437-452) [RLGLRKTG(pS)YGALAEI]
Isotype	IgG
Source/Host	Sheep
Species Reactivity	Mouse
Purification	affinity-purified using immobilized immunogen
Conjugate	Unconjugated
Applications	WB Recommended dilution: WB: 1 µg/mL Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.
Format	Liquid
Size	100 µg
Buffer	phosphate-buffered saline
Preservative	None
Storage	12 months at -20°C; aliquot as required

BACKGROUND

Introduction

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 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. [provided by RefSeq, Jan 2009]

GENE INFORMATION

Entrez Gene ID	4659
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UniProt ID	B2RAH5
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