bs-3287R **[Primary Antibody]**

phospho-MYPT1 (Thr696) Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 4659 **SWISS:** O14974

Target: MYPT1 (Thr696)

Immunogen: KLH conjugated synthesised phosphopeptide derived from human MYPT1 around the phosphorylation site of Thr696: RS(p-T)QG.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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 non muscle 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. Therefore Rho appears to inhibit myosin phosphatase through the action of Rho kinase.

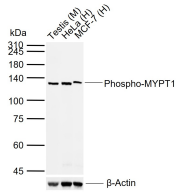
Applications: **WB** (1:500-2000)
Flow-Cyt (1μg /Test)

Reactivity: Human, Mouse, Rat (predicted: Rabbit, Cow, Chicken, Dog, Horse)

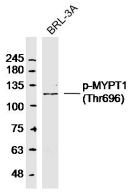
Predicted MW.: 113 kDa

Subcellular Location: Cytoplasm

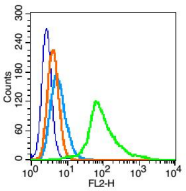
VALIDATION IMAGES



Sample: Lane 1: Mouse Testis tissue lysates Lane 2: Human HeLa cell lysates Lane 3: Human MCF-7 cell lysates Primary: Anti-Phospho-MYPT1 (Thr696) (bs-3287R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 113 kDa Observed band size: 125 kDa



Sample: BRL-3A (Rat)cell Lysate at 40 ug Primary: Anti-p-MYPT1(Thr696) (bs-3287R)at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 113kD Observed band size: 120 kD



Blank control(blue): Hela cells (fixed with 2% paraformaldehyde (10 min),then permeabilized with 90% ice-cold methanol for 30 min on ice). Primary Antibody:Rabbit Anti-Phospho-MYPT1(Thr696) antibody(bs-3287R), Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

SELECTED CITATIONS

- **[IF=5.396]** Luqing Song. et al. Chlorogenic acid improves the intestinal barrier by relieving endoplasmic reticulum stress and inhibiting ROCK/MLCK signaling pathways.. Food Funct. 2022 Feb;: WB ;Human. 10.1039/D1FO02662C
- **[IF=4.254]** Kwon Y et al. Involvement of inhibitor kappa B kinase 2 (IKK2) in the regulation of vascular tone.Lab Invest. 2018 Oct;98(10):1311-1319. IF ;Rat. 29785049

- **[IF=0.948]** Guiyuan Liu. et al. Rhubarb Anthraquinones Ameliorates Inflammatory Lung Injury by Enhancing Alveolar Epithelium Tight Junction Proteins through RhoA/ROCK1 Signalling. PHARMACOGN MAG. ;(): WB ;Mouse. 10.1177/09731296231158697