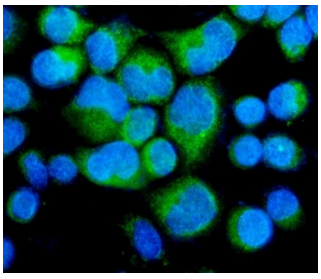
Myosin Phosphatase Antibody / MYPT1 / PPP1R12A (R30766)

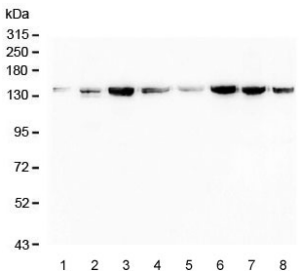
Catalog No.	Formulation	Size
R30766	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

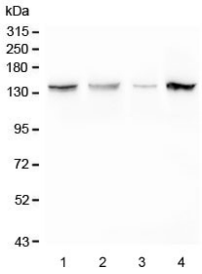
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	O14974
Localization	Cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml
Limitations	This Myosin Phosphatase antibody is available for research use only.



Immunofluorescent staining of FFPE human SiHa cells with Myosin Phosphatase antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) Jurkat, 3) HEK293, 4) COS-7 (monkey), 5) Raji, 6) K562, 7) Caco-2 and 8) HepG2 lysate with Myosin Phosphatase antibody. Expected molecular weight: 110~130 kDa.



Western blot testing of 1) rat brain, 2) rat C6, 3) mouse liver and 4) mouse NIH3T3 lysate with Myosin Phosphatase antibody. Expected molecular weight: 110~130 kDa.

Description

PPP1R12A, also called MYPT1 (Myosin phosphatase target subunit 1), is an enzyme that in humans is encoded by the PPP1R12A gene. Sequencing analysis showed that human PPP1R12A contains 1,030 amino acids with a calculated molecular mass of approximately 115 kD. PPP1R12A is the protein that regulates PP1 function in smooth muscle relaxation. The cellular MYPT1-PP1-delta -specific inhibitor CPI17 caused a loss of merlin function characterized by merlin phosphorylation, Ras activation, and transformation. Jin et al. concluded that PPP1R12A and its substrate merlin are part of a previously undescribed tumor suppressor cascade that can be hindered in 2 ways, by mutation of the NF2 gene and by upregulation of the oncoprotein CPI17.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Myosin Phosphatase antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the N-terminus of human Myosin Phosphatase (MKMADAKQKRNEQLKRW) was used as the immunogen for this Myosin Phosphatase antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the Myosin Phosphatase antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com