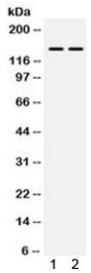
PPP1R12A Antibody / Myosin Phosphatase / MYPT1 (R31804)

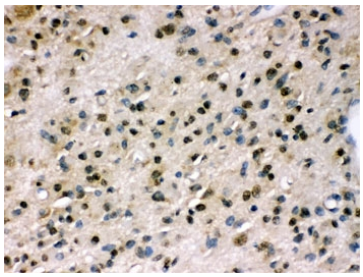
Catalog No.	Formulation	Size
R31804	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

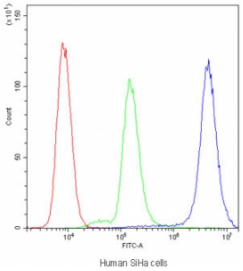
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	O14974
Localization	Cytoplasmic
Applications	Western blot: 0.1-0.5ug/ml IHC (FFPE): 0.5-1ug/ml FACS: 1-3ug/million cells Immunofluorescence: 2-4ug/ml
Limitations	This PPP1R12A antibody is available for research use only.



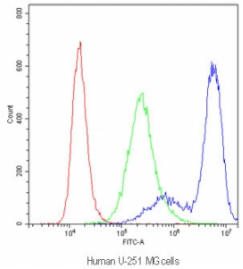
Western blot testing of 1) mouse skeletal muscle and 2) human HeLa lysate with PPP1R12A antibody. Expected molecular weight: 110~130 kDa, observed here at ~150 kDa.



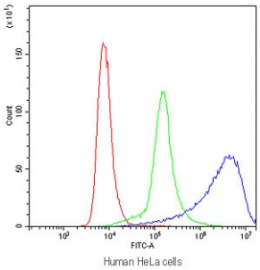
IHC testing of FFPE human glioma tissue with PPP1R12A antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



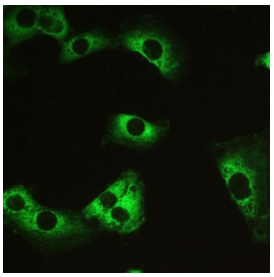
Flow cytometry testing of human SiHa cells with PPP1R12A antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=PPP1R12A antibody.



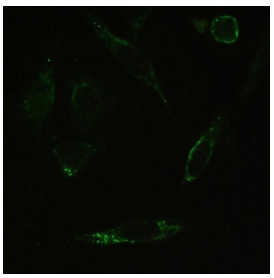
Flow cytometry testing of human U-251 MG cells with PPP1R12A antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=PPP1R12A antibody.



Flow cytometry testing of human HeLa cells with PPP1R12A antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=PPP1R12A antibody.



IHC testing of FFPE human U-251 MG cells with PPP1R12A antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE human SiHa cells with PPP1R12A antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.

Description

PPP1R12A (Protein phosphatase 1 regulatory subunit 12A), also called MYPT1 (Myosin phosphatase target subunit 1), is an enzyme that in humans is encoded by the PPP1R12A gene. PPP1R12A is one of the subunits of myosin phosphatase. Sequencing analysis showed that human PPP1R12A contains 1,030 amino acids with a calculated molecular mass of approximately 115 kD. The PPP1R12A gene is mapped on 12q21.2-q21.3. 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 two ways, by mutation of the NF2 gene and by upregulation of the oncoprotein CPI17.

Application Notes

Optimal dilution of the PPP1R12A antibody should be determined by the researcher.

Immunogen

Amino acids MKMADAKQKRNEQLKRWIGSETDLEPPVVKRQKTKVKFDD of human PPP1R12A were used as the immunogen for the PPP1R12A antibody.

Storage

After reconstitution, the PPP1R12A antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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