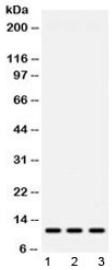
MPS1 Antibody / Metallopan-stimulin 1 (R32561)

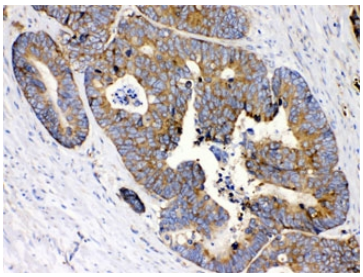
Catalog No.	Formulation	Size
R32561	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

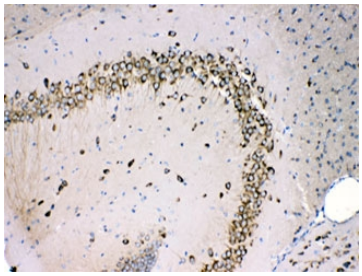
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P42677
Localization	Cytoplasmic, membranous
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml Immunofluorescence: 1-3ug/ml Immunocytochemistry: 1-3ug/ml Flow cytometry: 1-3ug/10^6 cells
Limitations	This MPS1 antibody is available for research use only.



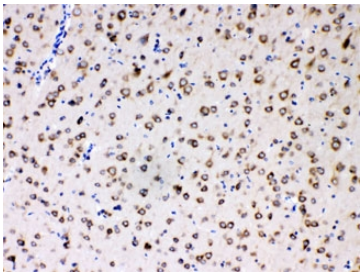
Western blot testing of 1) rat spleen, 2) mouse liver and 3) human HeLa lysate with MPS1 antibody at 0.5ug/ml. Predicted/observed molecular weight ~10 kDa.



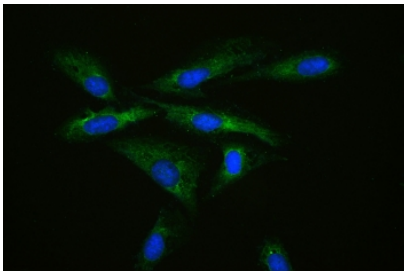
IHC testing of FFPE human intestine cancer tissue with MPS1 antibody at 1ug/ml. HIER: steam section in pH6 citrate buffer for 20 min.



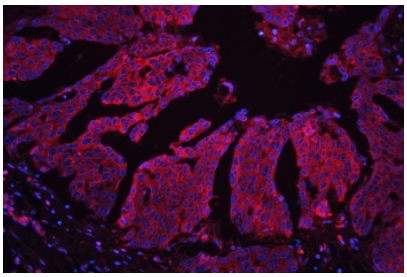
IHC testing of FFPE mouse brain with MPS1 antibody at 1ug/ml. HIER: steam section in pH6 citrate buffer for 20 min.



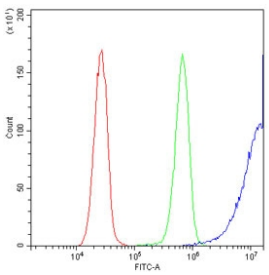
IHC testing of FFPE rat brain with MPS1 antibody at 1ug/ml. HIER: steam section in pH6 citrate buffer for 20 min.



Immunofluorescent staining of FFPE human U-2 OS cells with MPS1 antibody (green) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Immunofluorescent staining of FFPE human ovarian cancer tissue with MPS1 antibody (red) at 1ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human HeLa cells with MPS1 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= MPS1 antibody.

Description

40S ribosomal protein S27, also known as Metallopan-stimulin 1 or MPS-1, is a protein that in humans is encoded by the RPS27 gene. Ribosomes, the organelles that catalyze protein synthesis, consist of a small 40S subunit and a large 60S subunit. Together these subunits are composed of 4 RNA species and approximately 80 structurally distinct proteins. This gene encodes a ribosomal protein that is a component of the 40S subunit. The protein belongs to the S27E family of ribosomal proteins. It contains a C4-type zinc finger domain that can bind to zinc. The encoded protein has been shown to be able to bind to nucleic acid. It is located in the cytoplasm as a ribosomal component, but it has also been detected in the nucleus. Studies in rat indicate that ribosomal protein S27 is located near ribosomal protein S18 in the 40S subunit and is covalently linked to translation initiation factor eIF3. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome.

Application Notes

Differences in protocols and secondary/substrate sensitivity may require the MPS1 antibody to be titrated for optimal performance.

Immunogen

Amino acids P2-H84 from the human protein were used as the immunogen for the MPS1 antibody.

Storage

After reconstitution, the MPS1 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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