10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-PPP6C Rabbit Monoclonal Antibody

Catalog # ABO16174

Product Information

Application	WB, IF, ICC, FC
Primary Accession	O00743
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-PPP6C Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, Flow Cytometry applications. This antibody reacts with Human.

Additional Information

Gene ID	5537
Other Names	Serine/threonine-protein phosphatase 6 catalytic subunit, PP6C, 3.1.3.16, Serine/threonine-protein phosphatase 6 catalytic subunit, N-terminally processed, PPP6C {ECO:0000303|PubMed:29053956, ECO:0000312|HGNC:HGNC:9323}
Calculated MW	35144
Application Details	WB 1:500-1:2000 ICC/IF 1:50-1:200 FC 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 27P53
Immunogen	A synthesized peptide derived from human PPP6C
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	PPP6C {ECO:0000303|PubMed:29053956, ECO:0000312|HGNC:HGNC:9323}
Function	Catalytic subunit of protein phosphatase 6 (PP6) (PubMed: 17079228,

PubMed:29053956, PubMed:32474700). PP6 is a component of a signaling pathway regulating cell cycle progression in response to IL2 receptor stimulation (PubMed:10227379). N-terminal domain restricts G1 to S phase progression in cancer cells, in part through control of cyclin D1 (PubMed:17568194). During mitosis, regulates spindle positioning (PubMed:27335426). Down-regulates MAP3K7 kinase activation of the IL1 signaling pathway by dephosphorylation of MAP3K7 (PubMed:17079228). Also participates in the innate immune defense against viruses by desphosphorylating RIGI, an essential step that triggers RIGI-mediated signaling activation (PubMed:29053956). Also regulates innate immunity by acting as a negative regulator of the cGAS-STING pathway: mediates dephosphorylation and inactivation of CGAS and STING1 (PubMed:32474700, PubMed:32753499). CGAS dephosphorylation at 'Ser-435' impairs its ability to bind GTP, thereby inactivating it (PubMed:32474700).

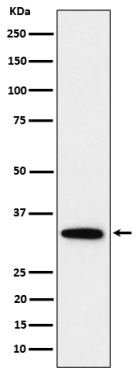
Cellular Location

Mitochondrion. Cytoplasm

Tissue Location

Ubiquitously expressed in all tissues tested with highest expression levels in testis, heart, kidney, brain, stomach, liver and skeletal muscle and lowest in placenta, lung colon and spleen.

Images



Western blot analysis of PPP6C expression in HeLa cell lysate.