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PPP6C Recombinant Rabbit mAb

Catalog # AP97138

Product Information

Application	WB
Primary Accession	O00743
Other Accession	O00743
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	35144
Physical State	Liquid
Immunogen	A synthesized peptide derived from human PPP6C
Epitope Specificity	280-305
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SIMILARITY	Belongs to the PPP phosphatase family. PP-6 (PP-V) subfamily.
SUBUNIT	Protein phosphatase 6 (PP6) holoenzyme is proposed to be a heterotrimeric complex formed by the catalytic subunit, a SAPS domain-containing subunit (PP6R) and an ankyrin repeat-domain containing regulatory subunit (ARS). Interacts with IGBP1, MAP3K7, NFKBIE, PPP6R1, PPP6R2 and PPP6R3.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Catalytic subunit of protein phosphatase 6 (PP6).PP6 is a component of a signaling pathway regulating cell cycle progression in response to IL2 receptor stimulation.

Additional Information

Gene ID	5537
Other Names	PP6; PP6C; 2310003C10Rik; PPP6_HUMAN; PPP6C; 3.1.3.16; PPP6; PPP6_MOUSE; PPP6_RAT; Protein phosphatase V (PP-V); Ppv; protein phosphatase 6 catalytic subunit; protein phosphatase 6, catalytic subunit
Dilution	WB=1:500-2000,ICC/IF=1:50-200,Flow-Cyt=1:50-100
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.