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

MPHOSPH9 Rabbit pAb

Catalog # AP99728

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q99550
Other Accession	Q99550
Predicted	Rat, Human, Mouse, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	133024
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MPHOSPH9
Epitope Specificity	451-550/1031
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Post-translational modifications	Phosphorylated in M (mitotic) phase.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Progression of cells from interphase to mitosis involves alterations in cell structures and activities. The transition from G2 to M phase is induced by M phase-promoting factor (MPF). In M phase, many proteins are phosphorylated directly by MPF or indirectly by kinases activated by MPF. These M phase phosphoproteins (MPPs), also known as MPHOSPHs, permit disassembly of interphase structures and generation of M phase enzymatic activities and structures. MPP9 (M-phase phosphoprotein 9), also known as MPHOSPH9, is a 1,031 amino acid peripheral membrane protein of the Golgi apparatus that exists as two alternatively spliced isoforms. The gene encoding MPP9 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p.

Additional Information

Gene ID	10198
Other Names	MPP-9; MPP9; MPP9_HUMAN; MPHOSPH9; M-phase phosphoprotein 9
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	MPHOSPH9
Synonyms	MPP9
Function	Negatively regulates cilia formation by recruiting the CP110- CEP97 complex (a negative regulator of ciliogenesis) at the distal end of the mother centriole in ciliary cells (PubMed:30375385). At the beginning of cilia formation, MPHOSPH9 undergoes TTBK2-mediated phosphorylation and degradation via the ubiquitin-proteasome system and removes itself and the CP110-CEP97 complex from the distal end of the mother centriole, which subsequently promotes cilia formation (PubMed:30375385).
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Golgi apparatus membrane; Peripheral membrane protein. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Localizes to the distal and proximal end of centriole pairs in duplicated centrosomes. In ciliated cells, localizes to the distal and proximal end of daughter centriole and proximal of the mother centriole but not in the distal end of the mother centriole (PubMed:21399614). Recruited by KIF24 to the distal end of mother centriole where it forms a ring-like structure (PubMed:30375385).

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