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

MMS22L/C6orf167 Rabbit pAb

MMS22L/C6orf167 Rabbit pAb
Catalog # AP56796

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q6ZRQ5
Predicted	Rat, Pig, Human, Mouse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	142321
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MMS22L/C6orf167
Epitope Specificity	451-550/1243
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus. Localizes to DNA damage sites, accumulates at stressed replication forks.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Making up nearly 6% of the human genome, chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. Porphyria cutanea tarda is associated with chromosome 6 through the HFE gene which, when mutated, predisposes an individual to developing this porphyria. Notably, the PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatiblity complex proteins, which are key molecular components of the immune system and determine predisposition to rheumatic diseases, are also located on chromosome 6. Stickler syndrome, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6. A bipolar disorder susceptibility locus has been identified on the q arm of chromosome 6. The C6orf167 gene product has been provisionally designated C6orf167 pending further characterization.

Additional Information

Gene ID	253714
Other Names	Protein MMS22-like, Methyl methanesulfonate-sensitivity protein 22-like, MMS22
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=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	MMS22
Function	Component of the MMS22L-TONSL complex, a complex that promotes homologous recombination-mediated repair of double-strand breaks (DSBs) at stalled or collapsed replication forks (PubMed:21055983, PubMed:21055984, PubMed:21055985, PubMed:21113133, PubMed:26527279, PubMed:27338793, PubMed:29478807). The MMS22L-TONSL complex is required to maintain genome integrity during DNA replication (PubMed:21055983, PubMed:21055984, PubMed:21055985, PubMed:27797818). It mediates the assembly of RAD51 filaments on single-stranded DNA (ssDNA): the MMS22L-TONSL complex is recruited to DSBs following histone replacement by histone chaperones and eviction of the replication protein A complex (RPA/RP-A) from DSBs (PubMed:21055983, PubMed:21055984, PubMed:21055985, PubMed:29478807). Following recruitment to DSBs, the TONSL-MMS22L complex promotes recruitment of RAD51 filaments and subsequent homologous recombination (PubMed:27797818, PubMed:29478807). Within the complex, MMS22L acts by binding ssDNA (PubMed:27797818).
Cellular Location	Nucleus. Chromosome. Note=Localizes to DNA damage sites, accumulates at stressed replication forks (PubMed:21055983, PubMed:21055984, PubMed:27797818). Recruited to stalled or collapsed replication forks; directly binds replication protein A complex (RPA/RP-A)-coated single-stranded DNA (ssDNA) (PubMed:27797818)

Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.