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

MMS19 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP18795c

Specification

MMS19 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q96T76

MMS19 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 64210

Other Names
MMS19 nucleotide excision repair protein homolog, hMMS19, MET18 homolog, MMS19-like protein, MMS19, MMS19L

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MMS19 Antibody (Center) Blocking Peptide - Protein Information

Name MMS19 (HGNC:13824)

Synonyms MMS19L

Function
Key component of the cytosolic iron-sulfur protein assembly (CIA) complex, a multiprotein complex that mediates the incorporation of iron-sulfur cluster into apoproteins specifically involved in DNA metabolism and genomic integrity (PubMed:29848660). In the CIA complex, MMS19 acts as an adapter between early-acting CIA components and a subset of cellular target iron-sulfur proteins such as ERCC2/XPD, FANCJ and RTEL1, thereby playing a key role in nucleotide excision repair (NER), homologous recombination-mediated double-strand break DNA repair, DNA replication and RNA polymerase II (POL II) transcription (PubMed:22678362, PubMed:22678361, PubMed:29225034, PubMed:23585563). As part of the mitotic spindle-associated MMXD complex, plays a role in chromosome segregation, probably by facilitating iron-sulfur (Fe-S) cluster assembly into ERCC2/XPD (PubMed:20797633). Together with CIAO2, facilitates the transfer of Fe-S clusters to

the motor protein KIF4A, which ensures proper localization of KIF4A to mitotic machinery components to promote the progression of mitosis (PubMed:29848660). Indirectly acts as a transcriptional coactivator of estrogen receptor (ER), via its role in iron-sulfur insertion into some component of the TFIIH-machinery (PubMed:11279242).

Cellular Location
Nucleus. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=In mitosis, enriched on centrosomes during prophase, localizes to the spindle during metaphase and surrounds compacted spindle midzone microtubules during telophase.

Tissue Location
Ubiquitously expressed with higher expression in testis.

MMS19 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

MMS19 Antibody (Center) Blocking Peptide - Images

MMS19 Antibody (Center) Blocking Peptide - Background

MMS19 may play a role in nucleotide excision repair (NER) and RNA polymerase II (POL II) transcription by interacting with ERCC2/XPD and ERCC3/XPB helicases, both subunits of NER-transcription factor TFIIH. May also function as a transcriptional coactivator of estrogen receptor (ER). May be involved in regulation of ER activity by bridging TFIIH with ER or may facilitate TFIIH-mediated phosphorylation of ER in specific promoters and cell types.

MMS19 Antibody (Center) Blocking Peptide - References

Ito, S., et al. Mol. Cell 39(4):632-640(2010)Briggs, F.B., et al. Am. J. Epidemiol. 172(2):217-224(2010)McWilliams, R.R., et al. Cancer Epidemiol. Biomarkers Prev. 18(4):1295-1302(2009)Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :Hatfield, M.D., et al. DNA Repair (Amst.) 5(8):914-924(2006)