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MMS19 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP18795c

Specification

MMS19 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q96T76
Other Accession	NP_071757.4
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**113290**
Antigen Region	**411-437**

MMS19 Antibody (Center) - Additional Information

Gene ID 64210

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

Target/Specificity
This MMS19 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 411-437 amino acids from the Central region of human MMS19.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MMS19 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

MMS19 Antibody (Center) - 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:22678361, PubMed:22678362, PubMed:23585563, PubMed:29225034). 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.

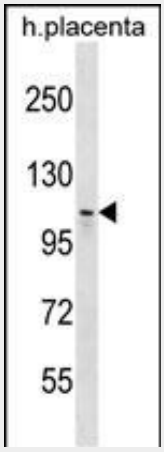
Tissue Location
Ubiquitously expressed with higher expression in testis.

MMS19 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MMS19 Antibody (Center) - Images



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MMS19 Antibody (Center)(Cat. #AP18795c) western blot analysis in human placenta tissue lysates (35ug/lane).This demonstrates the MMS19 antibody detected the MMS19 protein (arrow).

MMS19 Antibody (Center) - 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) - 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) :
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