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FANCM Antibody (C-Term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21872b

Specification

FANCM Antibody (C-Term) - Product Information

Application	**WB,E**
Primary Accession	Q8IYD8
Reactivity	**Human**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**232191**

FANCM Antibody (C-Term) - Additional Information

Gene ID 57697

Other Names
Fanconi anemia group M protein, Protein FACM, ATP-dependent RNA helicase FANCM, Fanconi anemia-associated polypeptide of 250 kDa, FAAP250, Protein Hef ortholog, FANCM, KIAA1596

Target/Specificity
This FANCM antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1752-1783 amino acids from human FANCM.

Dilution
WB~~1:2000

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
FANCM Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

FANCM Antibody (C-Term) - Protein Information

Name FANCM

Synonyms KIAA1596

Function DNA-dependent ATPase component of the Fanconi anemia (FA) core complex

(PubMed:16116422). Required for the normal activation of the FA pathway, leading to monoubiquitination of the FANCI-FANCD2 complex in response to DNA damage, cellular resistance to DNA cross- linking drugs, and prevention of chromosomal breakage (PubMed:16116422, PubMed:19423727, PubMed:20347428, PubMed:20347429, PubMed:29231814). In complex with CENPS and CENPX, binds double-stranded DNA (dsDNA), fork- structured DNA (fsDNA) and Holliday junction substrates (PubMed:20347428, PubMed:20347429). Its ATP-dependent DNA branch migration activity can process branched DNA structures such as a movable replication fork. This activity is strongly stimulated in the presence of CENPS and CENPX (PubMed:20347429). In complex with FAAP24, efficiently binds to single-strand DNA (ssDNA), splayed-arm DNA, and 3'-flap substrates (PubMed:17289582). In vitro, on its own, strongly binds ssDNA oligomers and weakly fsDNA, but does not bind to dsDNA (PubMed:16116434).

Cellular Location
Nucleus

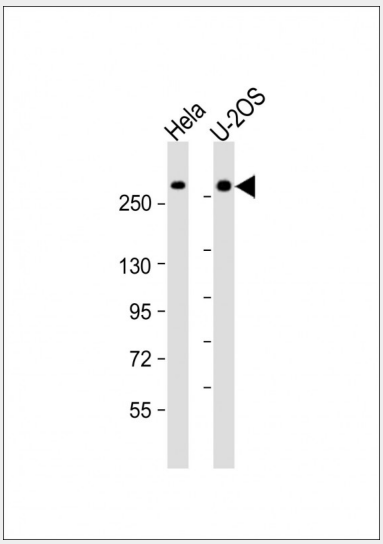
Tissue Location
Expressed in germ cells of fetal and adult ovaries. In fetal ovaries, it is present in oogonia but expression is stronger in pachytene stage oocytes. Expressed in oocytes arrested at the diplotene stage of prophase I during the last trimester of pregnancy and in adults (PubMed:29231814). Expressed in the testis (PubMed:30075111).

FANCM Antibody (C-Term) - 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

FANCM Antibody (C-Term) - Images



All lanes : Anti-FANCM Antibody (C-Term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2:

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U-2OS whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 232 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

FANCM Antibody (C-Term) - Background

ATPase required for FANCD2 ubiquitination, a key reaction in DNA repair. Binds to ssDNA but not to dsDNA. Recruited to forks stalled by DNA interstrand cross-links, and required for cellular resistance to such lesions.

FANCM Antibody (C-Term) - References

Meetei A.R.,et al.Nat. Genet. 37:958-963(2005).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Heilig R.,et al.Nature 421:601-607(2003).
Nagase T.,et al.DNA Res. 7:273-281(2000).
Mosedale G.,et al.Nat. Struct. Mol. Biol. 12:763-771(2005).