

**FANCM Blocking Peptide (C-Term)**  
**Synthetic peptide**  
**Catalog # BP21872b****Specification**

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**FANCM Blocking Peptide (C-Term) - Product Information**Primary Accession [Q8IYD8](#)**FANCM Blocking Peptide (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**

The synthetic peptide sequence is selected from aa 1772-1783 of HUMAN FANCM

**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.

**FANCM Blocking Peptide (C-Term) - Protein Information****Name** FANCM**Synonyms** KIAA1596**Function**

DNA-dependent ATPase component of the Fanconi anemia (FA) core complex (PubMed:<a href="http://www.uniprot.org/citations/16116422" target="\_blank">16116422</a>). 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:<a href="http://www.uniprot.org/citations/16116422" target="\_blank">16116422</a>, PubMed:<a href="http://www.uniprot.org/citations/19423727" target="\_blank">19423727</a>, PubMed:<a href="http://www.uniprot.org/citations/20347428" target="\_blank">20347428</a>, PubMed:<a href="http://www.uniprot.org/citations/20347429" target="\_blank">20347429</a>, PubMed:<a href="http://www.uniprot.org/citations/29231814" target="\_blank">29231814</a>). In complex with CENPS and CENPX, binds double-stranded DNA (dsDNA), fork- structured DNA (fsDNA) and Holliday junction substrates (PubMed:<a href="http://www.uniprot.org/citations/20347428" target="\_blank">20347428</a>).

target="\_blank">20347428</a>, PubMed:<a href="http://www.uniprot.org/citations/20347429" target="\_blank">20347429</a>). 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:<a href="http://www.uniprot.org/citations/20347429" target="\_blank">20347429</a>). In complex with FAAP24, efficiently binds to single-strand DNA (ssDNA), splayed-arm DNA, and 3'-flap substrates (PubMed:<a href="http://www.uniprot.org/citations/17289582" target="\_blank">17289582</a>). In vitro, on its own, strongly binds ssDNA oligomers and weakly fsDNA, but does not bind to dsDNA (PubMed:<a href="http://www.uniprot.org/citations/16116434" target="\_blank">16116434</a>).

### **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 Blocking Peptide (C-Term) - Protocols**

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

- [Blocking Peptides](#)

### **FANCM Blocking Peptide (C-Term) - Images**

### **FANCM Blocking Peptide (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 Blocking Peptide (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).