

FANCD2 Blocking Peptide (Center)
Synthetic peptide
Catalog # BP21536c**Specification**

FANCD2 Blocking Peptide (Center) - Product InformationPrimary Accession [Q9BXW9](#)**FANCD2 Blocking Peptide (Center) - Additional Information****Gene ID** 2177**Other Names**

Fanconi anemia group D2 protein, Protein FACD2, FANCD2, FACD

Target/Specificity

The synthetic peptide sequence is selected from aa 893-907 of HUMAN FANCD2

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.

FANCD2 Blocking Peptide (Center) - Protein Information**Name** FANCD2**Synonyms** FACD**Function**

Required for maintenance of chromosomal stability (PubMed:11239453, PubMed:14517836). Promotes accurate and efficient pairing of homologs during meiosis (PubMed:14517836). Involved in the repair of DNA double-strand breaks, both by homologous recombination and single-strand annealing (PubMed:15671039, PubMed:15650050, PubMed:30335751, PubMed:36385258). The FANCI-FANCD2 complex binds and scans double-stranded DNA (dsDNA) for DNA damage; this complex stalls at DNA junctions between double-stranded DNA and single-stranded DNA (By similarity). May participate in S phase and G2 phase checkpoint

activation upon DNA damage (PubMed:15377654). Plays a role in preventing breakage and loss of missegregating chromatin at the end of cell division, particularly after replication stress (PubMed:15454491, PubMed:15661754). Required for the targeting, or stabilization, of BLM to non-centromeric abnormal structures induced by replicative stress (PubMed:15661754, PubMed:19465921). Promotes BRCA2/FANCD1 loading onto damaged chromatin (PubMed:11239454, PubMed:12239151, PubMed:12086603, PubMed:15115758, PubMed:15199141, PubMed:15671039, PubMed:18212739). May also be involved in B-cell immunoglobulin isotype switching.

Cellular Location

Nucleus Note=Concentrates in nuclear foci during S phase and upon genotoxic stress. At the onset of mitosis, excluded from chromosomes and diffuses into the cytoplasm, returning to the nucleus at the end of cell division. Observed in a few spots localized in pairs on the sister chromatids of mitotic chromosome arms and not centromeres, one on each chromatids. These foci coincide with common fragile sites and could be sites of replication fork stalling. The foci are frequently interlinked through BLM-associated ultra-fine DNA bridges. Following aphidicolin treatment, targets chromatid gaps and breaks

Tissue Location

Highly expressed in germinal center cells of the spleen, tonsil, and reactive lymph nodes, and in the proliferating basal layer of squamous epithelium of tonsil, esophagus, oropharynx, larynx and cervix. Expressed in cytotrophoblastic cells of the placenta and exocrine cells of the pancreas (at protein level). Highly expressed in testis, where expression is restricted to maturing spermatocytes

FANCD2 Blocking Peptide (Center) - Protocols

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

- [Blocking Peptides](#)

FANCD2 Blocking Peptide (Center) - Images

FANCD2 Blocking Peptide (Center) - Background

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FANCD2 Blocking Peptide (Center) - References

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