

MTMR15 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP5247a**Specification**

MTMR15 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [O9Y2M0](#)**MTMR15 Antibody (N-term) Blocking peptide - Additional Information**

Gene ID 22909

Other Names

Fanconi-associated nuclease 1, 3121-, FANCD2/FANCI-associated nuclease 1, Myotubularin-related protein 15, FAN1, KIAA1018, MTMR15

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.

MTMR15 Antibody (N-term) Blocking peptide - Protein Information

Name FAN1 {ECO:0000303|PubMed:20603015}

Function

Nuclease required for the repair of DNA interstrand cross- links (ICL) recruited at sites of DNA damage by monoubiquitinated FANCD2. Specifically involved in repair of ICL-induced DNA breaks by being required for efficient homologous recombination, probably in the resolution of homologous recombination intermediates (PubMed:20603015, PubMed:20603016, PubMed:20603073, PubMed:20671156, PubMed:24981866, PubMed:25430771). Not involved in DNA double-strand breaks resection (PubMed:20603015, PubMed:20603016). Acts as a 5'-3' exonuclease that anchors at a cut end of DNA and cleaves DNA successively at every third nucleotide, allowing to excise an ICL from one strand through flanking incisions. Probably keeps excising with 3'-flap annealing until it reaches and unhooks the ICL (PubMed:25430771). Acts at sites

that have a 5'-terminal phosphate anchor at a nick or a 1- or 2-nucleotide flap and is augmented by a 3' flap (PubMed:25430771). Also has endonuclease activity toward 5'-flaps (PubMed:20603015, PubMed:20603016, PubMed:24981866).

Cellular Location

Nucleus Note=Localizes at sites of DNA damage following recruitment by monoubiquitinated FANCD2 (PubMed:20603015, PubMed:20603016). Localizes to stalled replication forks via its UBZ4-type zinc finger (PubMed:20935496).

MTMR15 Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

MTMR15 Antibody (N-term) Blocking peptide - Images**MTMR15 Antibody (N-term) Blocking peptide - Background**

MTMRF encodes a member of the myotubularin-related class 1 cysteine-based protein tyrosine phosphatases. The encoded protein may be catalytically inactive.

MTMR15 Antibody (N-term) Blocking peptide - References

Kimura, K., et al. Genome Res. 16(1):55-65(2006)Suzuki, Y., et al. Genome Res. 14(9):1711-1718(2004)Alonso, A., et al. Cell 117(6):699-711(2004)