

**MTMR15 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP5247a**

**Specification**

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**MTMR15 Antibody (N-term) - Product Information**

Application	FC, WB,E
Primary Accession	<a href="#">O9Y2M0</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	146-174

**MTMR15 Antibody (N-term) - Additional Information**

**Gene ID** 22909

**Other Names**

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

**Target/Specificity**

This MTMRF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 146-174 amino acids from the N-terminal region of human MTMRF.

**Dilution**

FC~~1:10~50

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**

MTMR15 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**MTMR15 Antibody (N-term) - 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

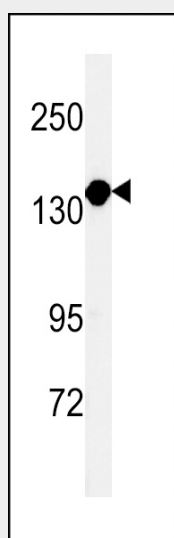
Nucleus Note=Localizes at sites of DNA damage following recruitment by monoubiquitinated FANCD2 (PubMed:[20603015](#), PubMed:[20603016](#)). Localizes to stalled replication forks via its UBZ4-type zinc finger (PubMed:[20935496](#)).

#### MTMR15 Antibody (N-term) - Protocols

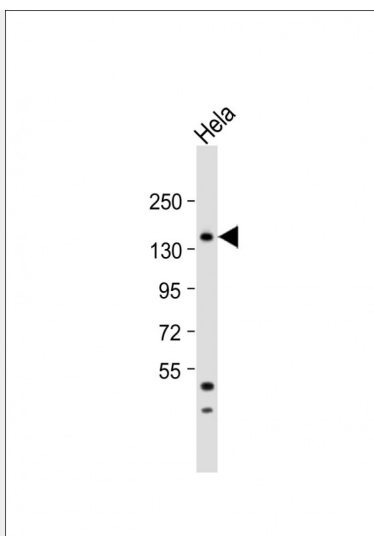
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

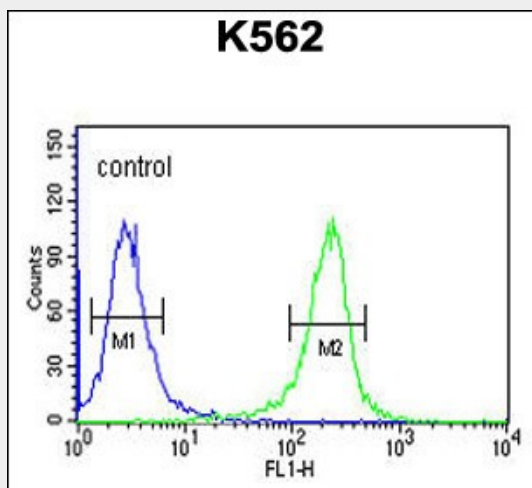
#### MTMR15 Antibody (N-term) - Images



Western blot analysis of MTMR15 Antibody (N-term) (Cat. #AP5247a) in K562 cell line lysates (35ug/lane).MTMR15 (arrow) was detected using the purified Pab.



Anti-MTMRF Antibody (N-term) at 1:1000 dilution + HeLa 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 : 114 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



MTMRF Antibody (N-term) (Cat. #AP5247a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **MTMR15 Antibody (N-term) - 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) - 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)