

MTRF1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP17473c**Specification**

MTRF1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [O75570](#)**MTRF1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 9617**Other Names**

Peptide chain release factor 1, mitochondrial, MRF-1, MtRF-1, MTRF1

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.

MTRF1 Antibody (Center) Blocking Peptide - Protein Information**Name** RF1M**Function**

Mitochondrial peptide chain release factor that directs the termination of translation in response to the peptide chain non- canonical stop codons AGG and AGA (PubMed:36302763, PubMed:36596788, PubMed:37141370).

Non-canonical termination codons AGG and AGA are found at the end of MT-CO1/COX1 and MT-ND6/ND6 open reading frames, respectively (PubMed:37141370). Recognizes non-canonical stop codons via a network of interactions between the codon, MTRF1 and the ribosomal RNA (rRNA): in contrast to other translation release factors, which identify the codon in the A-site via direct interactions of amino acid side chains with the bases, MTRF1 repositions the first 2 bases of the stop codon to use an intricate network of interactions that includes residues of the release factor, the rRNA of the small ribosomal subunit, as well as neighboring bases of the mRNA (PubMed:37141370).

Cellular Location

Mitochondrion

MTRF1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

MTRF1 Antibody (Center) Blocking Peptide - Images

MTRF1 Antibody (Center) Blocking Peptide - Background

The protein encoded by this gene was determined by insilico methods to be a mitochondrial protein with similarity to the peptide chain release factors (RFs) discovered in bacteria and yeast. The peptide chain release factors direct the termination of translation in response to the peptide chain termination codons. Initially thought to have a role in the termination of mitochondrial protein synthesis, a recent publication found no mitochondrial translation release functionality. Multiple alternatively spliced transcript variants have been suggested by mRNA and EST data; however, their full-length natures are not clear. [provided by RefSeq].

MTRF1 Antibody (Center) Blocking Peptide - References

Antonicka, H., et al. Am. J. Hum. Genet. 87(1):115-122(2010) Nozaki, Y., et al. Genes Cells 13(5):429-438(2008) Soleimanpour-Lichaei, H.R., et al. Mol. Cell 27(5):745-757(2007) Hansen, L.L., et al. Cytogenet. Cell Genet. 88 (1-2), 91-92 (2000) :Zhang, Y., et al. Biochim. Biophys. Acta 1443 (1-2), 245-250 (1998) :