

**MTIF2 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP16956a**

**Specification**

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**MTIF2 Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession [P46199](#)

**MTIF2 Antibody (N-term) Blocking Peptide - Additional Information**

**Gene ID** 4528

**Other Names**

Translation initiation factor IF-2, mitochondrial, IF-2(Mt), IF-2Mt, IF2(mt), MTIF2

**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.

**MTIF2 Antibody (N-term) Blocking Peptide - Protein Information**

**Name** MTIF2

**Function**

One of the essential components for the initiation of protein synthesis. Protects formylmethionyl-tRNA from spontaneous hydrolysis and promotes its binding to the 30S ribosomal subunits. Also involved in the hydrolysis of GTP during the formation of the 70S ribosomal complex.

**Cellular Location**

Mitochondrion.

**Tissue Location**

Expressed in all tissues examined. Highest level in skeletal muscle

**MTIF2 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**MTIF2 Antibody (N-term) Blocking Peptide - Images****MTIF2 Antibody (N-term) Blocking Peptide - Background**

During the initiation of protein biosynthesis, initiationfactor-2 (IF-2) promotes the binding of the initiator tRNA to the small subunit of the ribosome in a GTP-dependent manner. Prokaryotic IF-2 is a single polypeptide, while eukaryotic cytoplasmic IF-2 (eIF-2) is a trimeric protein. Bovine liver mitochondria contain IF-2(mt), an 85-kD monomeric protein that is equivalent to prokaryotic IF-2. The predicted 727-amino acid human protein contains a 29-amino acid presequence. Human IF-2(mt) shares 32 to 38% amino acid sequence identity with yeast IF-2(mt) and several prokaryotic IF-2s, with the greatest degree of conservation in the G domains of the proteins. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq].

**MTIF2 Antibody (N-term) Blocking Peptide - References**

Dick, D.M., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. (2010) In press :Reiling, E., et al. Eur. J. Hum. Genet. 17(8):1056-1062(2009) Miura, E., et al. Plant Cell 19(4):1313-1328(2007) Bouwmeester, T., et al. Nat. Cell Biol. 6(2):97-105(2004) Overman, R.G. Jr., et al. Biochim. Biophys. Acta 1628(3):195-205(2003)