

## MTIF2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16956a

## **Specification**

## MTIF2 Antibody (N-term) - Product Information

Application WB,E
Primary Accession P46199

Other Accession <u>NP\_001005369.1</u>, <u>NP\_002444.2</u>

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rabbit
Polyclonal
Rabbit IgG
Rabbit IgG
138-167

## MTIF2 Antibody (N-term) - Additional Information

#### **Gene ID 4528**

#### **Other Names**

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

#### Target/Specificity

This MTIF2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 138-167 amino acids from the N-terminal region of human MTIF2.

#### **Dilution**

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**

MTIF2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## MTIF2 Antibody (N-term) - 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**

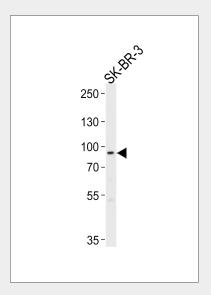
Expressed in all tissues examined. Highest level in skeletal muscle

## MTIF2 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

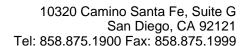
## MTIF2 Antibody (N-term) - Images



Western blot analysis of lysate from SK-BR-3 cell line, using MTIF2 Antibody (N-term)(Cat. #AP16956a). AP16956a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

## MTIF2 Antibody (N-term) - Background

During the initiation of protein biosynthesis, initiation factor-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) - 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)