

**mtTFA Polyclonal Antibody**  
Catalog # AP71099**Specification****mtTFA Polyclonal Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">Q00059</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

**mtTFA Polyclonal Antibody - Additional Information****Gene ID** 7019**Other Names**

TFAM; TCF6; TCF6L2; Transcription factor A; mitochondrial; mtTFA; Mitochondrial transcription factor 1; MtTF1; Transcription factor 6; TCF-6; Transcription factor 6-like 2

**Dilution**

IHC~~Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**mtTFA Polyclonal Antibody - Protein Information****Name** TFAM ([HGNC:11741](#))**Synonyms** TCF6, TCF6L2**Function**

Binds to the mitochondrial light strand promoter and functions in mitochondrial transcription regulation (PubMed: [29445193](http://www.uniprot.org/citations/29445193), PubMed: [32183942](http://www.uniprot.org/citations/32183942)). Component of the mitochondrial transcription initiation complex, composed at least of TFB2M, TFAM and POLRMT that is required for basal transcription of mitochondrial DNA (PubMed: [29149603](http://www.uniprot.org/citations/29149603)). In this complex, TFAM recruits POLRMT to a specific promoter whereas TFB2M induces structural changes in POLRMT to enable promoter opening and trapping of the DNA non-template strand (PubMed: [20410300](http://www.uniprot.org/citations/20410300)). Required for accurate and efficient promoter recognition by the mitochondrial RNA polymerase (PubMed: [22037172](http://www.uniprot.org/citations/22037172)). Promotes transcription initiation from the HSP1 and the light

strand promoter by binding immediately upstream of transcriptional start sites (PubMed:<a href="http://www.uniprot.org/citations/22037172" target="\_blank">22037172</a>). Is able to unwind DNA (PubMed:<a href="http://www.uniprot.org/citations/22037172" target="\_blank">22037172</a>). Bends the mitochondrial light strand promoter DNA into a U-turn shape via its HMG boxes (PubMed:<a href="http://www.uniprot.org/citations/1737790" target="\_blank">1737790</a>). Required for maintenance of normal levels of mitochondrial DNA (PubMed:<a href="http://www.uniprot.org/citations/19304746" target="\_blank">19304746</a>, PubMed:<a href="http://www.uniprot.org/citations/22841477" target="\_blank">22841477</a>). May play a role in organizing and compacting mitochondrial DNA (PubMed:<a href="http://www.uniprot.org/citations/22037171" target="\_blank">22037171</a>).

### Cellular Location

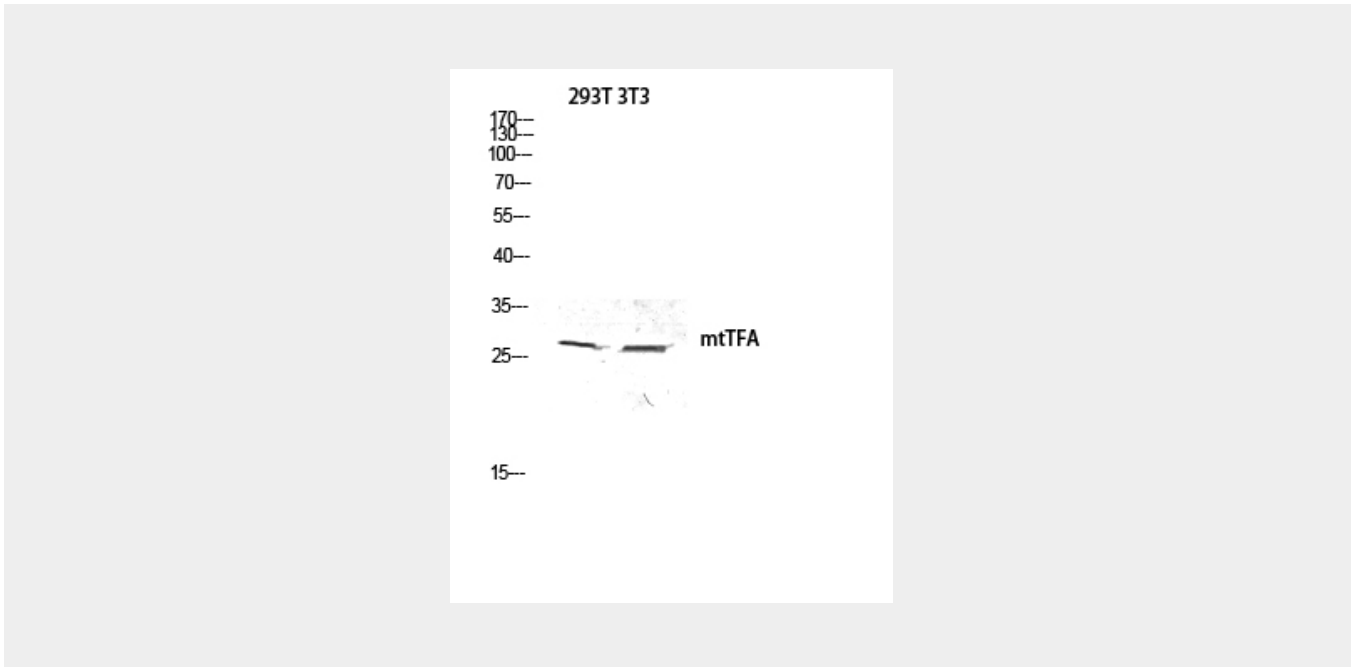
Mitochondrion. Mitochondrion matrix, mitochondrion nucleoid

### mtTFA Polyclonal Antibody - 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](#)

### mtTFA Polyclonal Antibody - Images



### mtTFA Polyclonal Antibody - Background

Binds to the mitochondrial light strand promoter and functions in mitochondrial transcription regulation (PubMed:29445193). Required for accurate and efficient promoter recognition by the mitochondrial RNA polymerase. Promotes transcription initiation from the HSP1 and the light strand promoter by binding immediately upstream of transcriptional start sites. Is able to unwind DNA.

Bends the mitochondrial light strand promoter DNA into a U-turn shape via its HMG boxes. Required for maintenance of normal levels of mitochondrial DNA. May play a role in organizing and compacting mitochondrial DNA.