10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# mtTFA Antibody

Rabbit mAb
Catalog # AP91602

## Product Information

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|---|---|
| **Application** | WB, IHC, IF, ICC, IP, IHF |
| **Primary Accession** | Q00059 |
| **Reactivity** | Human |
| **Clonality** | Monoclonal |
| **Other Names** | MtTF1; mtTFA; TCF6; TCF6L1; TCF6L2; TCF6L3; TFAM; Transcription factor 6; |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Calculated MW** | 29097 |

## Additional Information

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| **Dilution** | WB 1:1000~1:5000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 |
| **Purification** | Affinity-chromatography |
| **Immunogen** | A synthesized peptide derived from human mtTFA |
| **Description** | Binds to the mitochondrial light strand promoter and functions in mitochondrial transcription regulation. Required for accurate and efficient promoter recognition by the mitochondrial RNA polymerase. |
| **Storage Condition and Buffer** | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

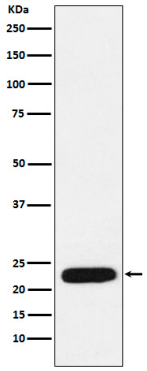
## Protein Information

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|---|---|
| **Name** | TFAM ( HGNC:11741) |
| **Synonyms** | TCF6, TCF6L2 |
| **Function** | Binds to the mitochondrial light strand promoter and functions in mitochondrial transcription regulation (PubMed:29445193, PubMed: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). 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). Required for accurate and efficient promoter recognition by the mitochondrial RNA polymerase (PubMed:22037172). Promotes transcription initiation from the HSP1 and the light strand promoter by binding immediately upstream of transcriptional start sites (PubMed:22037172). Is able to unwind DNA (PubMed:22037172). Bends the mitochondrial light strand promoter DNA into a U-turn shape via its HMG boxes (PubMed:1737790). Required for |

maintenance of normal levels of mitochondrial DNA (PubMed:19304746, PubMed:22841477). May play a role in organizing and compacting mitochondrial DNA (PubMed:22037171).

**Cellular Location** Mitochondrion. Mitochondrion matrix, mitochondrion nucleoid

## Images




Western blot analysis of mtTFA expression in MCF7 cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.