

TFAM Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10682**Specification**

TFAM Antibody - Product Information

Application	WB
Primary Accession	O91ZW1
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	28187

TFAM Antibody - Additional Information**Gene ID** 83474**Application & Usage**

Western blotting (0.5-4 µg/ml). However, the optimal concentrations should be determined individually. The antibody recognizes 27 kDa band from rat kidney tissue lysate. Reactivity to other species has not been tested.

Other Names

Transcription factor A, MtTF1, TCF6, TCF6L2, mtTFA

Target/Specificity

TFAM

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.5mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

TFAM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TFAM Antibody - Protein Information

Name Tfam {ECO:0000312|RGD:620682}

Function

[Isoform Mitochondrial]: Binds to the mitochondrial light strand promoter and functions in mitochondrial transcription regulation. Component of the mitochondrial transcription initiation complex, composed at least of TFB2M, TFAM and POLRMT that is required for basal transcription of mitochondrial DNA. 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. 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 (By similarity).

Cellular Location

[Isoform Mitochondrial]: Mitochondrion {ECO:0000250|UniProtKB:Q00059}. Mitochondrion matrix, mitochondrion nucleoid {ECO:0000250|UniProtKB:Q00059}

Tissue Location

The mitochondrial isoform is widely expressed while the nuclear isoform is testis-specific

TFAM 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](#)

TFAM Antibody - Images**TFAM Antibody - Background**

Transcription factor A mitochondria (TFAM) is an important activator of mitochondrial DNA transcription and replication. Studies in mice have shown that TFAM is required to regulate the mitochondrial genome copy number and is important for embryonic development. TFAM has been associated with mitochondrial disorder which includes ocular myopathy and muscular wasting in humans. Kearns-Sayre syndrome was shown in mouse model when expression of the gene was eliminated by targeted disruption in heart and muscle cells.