

## Tfam antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al11089

### **Specification**

## Tfam antibody - C-terminal region - Product Information

Application WB, IHC Primary Accession P40630

Other Accession
Reactivity
Mouse, Rat, Rabbit, Bovine
Predicted
Mouse, Rat, Rabbit, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 27kDa KDa

## Tfam antibody - C-terminal region - Additional Information

**Gene ID 21780** 

Alias Symbol Al661103, Hmgts, mtTFA, tsHMG

**Other Names** 

Transcription factor A, mitochondrial, mtTFA, Testis-specific high mobility group protein, TS-HMG, Tfam, Hmgts

#### **Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

### **Reconstitution & Storage**

Add 50 ul of distilled water. Final anti-Tfam antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

### **Precautions**

Tfam antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## Tfam antibody - C-terminal region - Protein Information

Name Tfam {ECO:0000312|MGI:MGI:107810}

**Synonyms** Hmgts

## **Function**

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



efficient promoter recognition by the mitochondrial RNA polymerase (By similarity). Promotes transcription initiation from the HSP1 and the light strand promoter by binding immediately upstream of transcriptional start sites (By similarity). Is able to unwind DNA (By similarity). Bends the mitochondrial light strand promoter DNA into a U-turn shape via its HMG boxes (By similarity). Required for maintenance of normal levels of mitochondrial DNA (PubMed:<a href="http://www.uniprot.org/citations/9500544" target="\_blank">9500544</a>). May play a role in organizing and compacting mitochondrial DNA (PubMed:<a href="http://www.uniprot.org/citations/17581862" target="\_blank">17581862</a>).

### **Cellular Location**

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

### **Tissue Location**

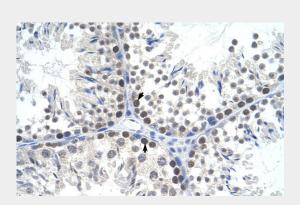
The mitochondrial isoform is widely expressed while the nuclear isoform is testis-specific

# Tfam antibody - C-terminal region - Protocols

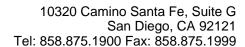
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

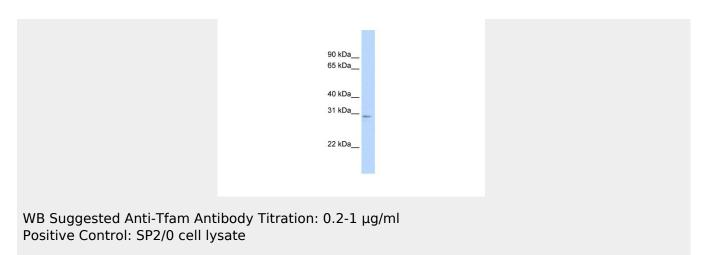
## Tfam antibody - C-terminal region - Images



### Mouse testicle







# **Tfam antibody - C-terminal region - References**

Noack,H., (2006) Biochim. Biophys. Acta 1760 (2), 141-150 Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.