

## **TFAM Blocking Peptide**

Catalog # PBV10410b

# **Specification**

## **TFAM Blocking Peptide - Product Information**

Primary Accession
Gene ID
Calculated MW
Q91ZW1
83474
28187

## **TFAM Blocking Peptide - Additional Information**

**Gene ID 83474** 

Application & Usage The peptide is used for blocking the

antibody activity of TFAM. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for

30-60 minutes at 37°C.

#### **Other Names**

Transcription factor A, mitochondrial, mtTFA, Tfam

#### Target/Specificity

TFAM

# **Formulation**

 $50 \mu g$  (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

# **Reconstitution & Storage**

-20 °C

## **Background Descriptions**

#### **Precautions**

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

## **TFAM Blocking Peptide - 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 Blocking Peptide - Protocols**

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

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

**TFAM Blocking Peptide - Images**