

TFAM antibody - middle region

Rabbit Polyclonal Antibody Catalog # AI11088

Product Information

Application WB Primary Accession P40630

Other Accession NM_009360, NP_033386
Reactivity Mouse, Rat, Rabbit

Predicted Mouse, Rat Host Rabbit Clonality Polyclonal Calculated MW 27988

Additional Information

Gene ID 21780

Alias Symbol Hmgts, mtTFA, tsHMG, AI661103

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 - middle region is for research use only and not for use in

diagnostic or therapeutic procedures.

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: 9500544). May play a role in organizing and compacting mitochondrial DNA

(PubMed: 17581862).

Cellular Location [Isoform Mitochondrial]: Mitochondrion {ECO:0000250 | UniProtKB:Q00059}.

Mitochondrion matrix, mitochondrion nucleoid

{ECO:0000250 | UniProtKB:Q00059}

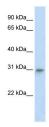
Tissue Location The mitochondrial isoform is widely expressed while the nuclear isoform is

testis-specific

References

Noack,H., et al., (2006) Biochim. Biophys. Acta 1760 (2), 141-150Reconstitution 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.

Images



WB Suggested Anti-TFAM Antibody Titration: 0.2-1 µg/ml

ELISA Titer: 1:62500

Positive Control: NIH/3T3 cell lysate

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