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

Tfam antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI14322

Product Information

Application	WB, IHC
Primary Accession	P40630
Other Accession	NM_009360, NP_033386
Reactivity	Mouse
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27988

Additional Information

Gene ID	21780
Alias Symbol	AI661103, 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 - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

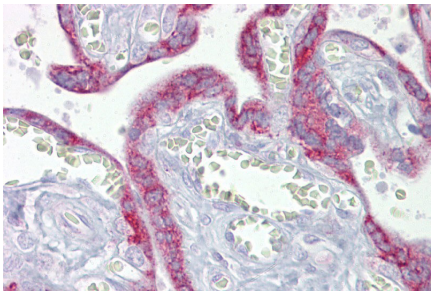
Name	Tfam {ECO:0000312|MGI:MGI:107810}
Synonyms	Hmgts
Function	[Isoform Mitochondrial]: Binds to the mitochondrial light strand promoter and functions in mitochondrial transcription regulation (By similarity). Component of the mitochondrial transcription initiation complex, composed at least of TFB2M, 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

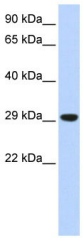
References

Larsson N.G.,et al.Nat. Genet. 13:296-302(1996).
Carninci P.,et al.Science 309:1559-1563(2005).
Cermakian N.,et al.Submitted (AUG-1996) to the EMBL/GenBank/DDBJ databases.
Boissonneault G.,et al.Mol. Cell. Biol. 13:4323-4330(1993).
Larsson N.G.,et al.Nat. Genet. 18:231-236(1998).

Images



Immunohistochemistry with Placenta tissue at an antibody concentration of 5µg/ml using anti-Tfam antibody (AI14322)



WB Suggested Anti-Tfam Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:312500
Positive Control: Mouse Muscle

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