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mtTFA Polyclonal Antibody

Catalog # AP71099

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q00059
Reactivity	Human, Rat, Mouse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	29097

Additional Information

Gene ID	7019
Other Names	TFAM; TCF6; TCF6L2; Transcription factor A; mitochondrial; mtTFA; Mitochondrial transcription factor 1; MtTF1; Transcription factor 6; TCF-6; Transcription factor 6-like 2
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

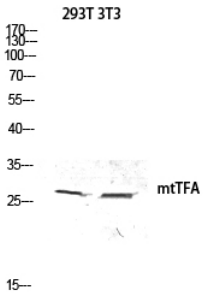
Name	TFAM (HGNC:11741)
Synonyms	TCF6, TCF6L2
Function	Binds to the mitochondrial light strand promoter and functions in mitochondrial transcription regulation (PubMed:29445193, PubMed:32183942). Component of the mitochondrial transcription initiation complex, composed at least of TFB2M, TFAM and POLRMT that is required for basal transcription of mitochondrial DNA (PubMed:29149603). 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 (PubMed:20410300). Required for accurate and efficient promoter recognition by the mitochondrial RNA polymerase (PubMed:22037172). Promotes transcription initiation from the HSP1 and the light strand promoter by binding immediately upstream of transcriptional start sites (PubMed:22037172). Is able to unwind DNA (PubMed:22037172). Bends the mitochondrial light strand promoter DNA into a U-turn shape via its HMG boxes (PubMed:1737790). Required for maintenance of normal levels of mitochondrial DNA (PubMed:19304746,

	PubMed:22841477). May play a role in organizing and compacting mitochondrial DNA (PubMed:22037171).
Cellular Location	Mitochondrion. Mitochondrion matrix, mitochondrion nucleoid

Background

Binds to the mitochondrial light strand promoter and functions in mitochondrial transcription regulation (PubMed:29445193). 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.

Images



Western blot analysis of 293T 3T3 lysis using mtTFA antibody. Antibody was diluted at 1:500

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