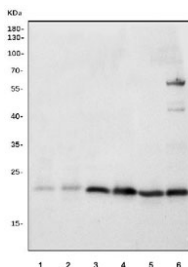


## mtTFA Antibody / Tfam (RQ6444)

Catalog No.	Formulation	Size
RQ6444	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

### Bulk quote request

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Mouse, Rat
<b>Format</b>	Purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	P40630
<b>Localization</b>	Nuclear, cytoplasmic
<b>Applications</b>	Western Blot : 0.5-1ug/ml Direct ELISA : 0.1-0.5ug/ml
<b>Limitations</b>	This mtTFA antibody is available for research use only.



Western blot testing of 1) rat thymus, 2) rat PC-12, 3) mouse brain, 4) mouse spleen, 5) mouse thymus and 6) mouse NIH 3T3 cell lysate with mtTFA antibody. Expected molecular weight: 24~29 kDa.

## Description

TFAM (Transcription factor A, mitochondrial), also known as mtTFA, TCF6 or TCF6L2, is a 162-amino acid protein that activates transcription of each mitochondrial DNA (mtDNA) strand by binding to an element of approximately 30 nucleotides present in both the light-strand and the heavy-strand promoters. By Southern blot analysis of restriction enzyme digests of human/Chinese hamster somatic cell hybrid lines, Milatovich et al.(1992) mapped TFAM sequences, which they called MTTF1, to 3 different chromosomes: chromosomes 10, 7p, and 11q. By PCR-based screening of a somatic cell hybrid panel and by fluorescence in situ hybridization, Scott(2007) stated that the sequences mapped to

chromosomes 7p(TCF6L1) and 11q(MTTF1, or TCF6L3) are pseudogenes. Larsson et al.(1997) mapped the mouse mitochondrial transcription factor A gene(Tfam) to the central part of mouse chromosome 10. This region exhibits syntenic homology with human 10q21. Mitochondrial transcription factor A is a key activator of mitochondrial transcription in mammals. It also has a role in mitochondrial DNA replication, since transcription generates an RNA primer necessary for initiation of mtDNA replication.

## Application Notes

Optimal dilution of the mtTFA antibody should be determined by the researcher.

## Immunogen

Recombinant mouse protein (amino acids M1-D211) was used as the immunogen for the mtTFA antibody.

## Storage

After reconstitution, the mtTFA antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.