10320 Camino Santa Fe, Suite G
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TFAM (Transcription Factor A, mitochondrial) Antibody
Rabbit polyclonal antibody
Catalog # AN1221

Specification

TFAM (Transcription Factor A, mitochondrial) Antibody - Product Information

Application	**WB**
Primary Accession	P40630
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**24 KDa**

TFAM (Transcription Factor A, mitochondrial) Antibody - Additional Information

Gene ID	**21780**
Gene Name	**TFAM**

Other Names
Transcription factor A, mitochondrial, mtTFA, Testis-specific high mobility group protein, TS-HMG, Tfam, Hmgts

Target/Specificity
Native recombinant mouse TFAM protein with c-terminal 6-his tag.

Dilution
WB~~ 1:2000

Format
serum

Antibody Specificity
Specific for the ~24 kDa TFAM protein.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
TFAM (Transcription Factor A, mitochondrial) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

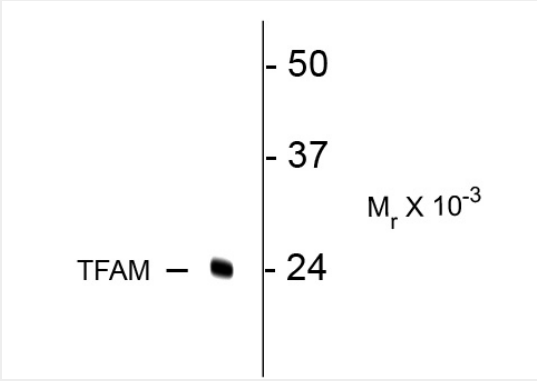
TFAM (Transcription Factor A, mitochondrial) Antibody - Protocols

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

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- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TFAM (Transcription Factor A, mitochondrial) Antibody - Images



Western blot of rat kidney lysate showing specific immunolabeling of the ~24k TFAM protein.

TFAM (Transcription Factor A, mitochondrial) Antibody - Background

Mitochondrial Transcription Factor A (TFAM) is a key activator of mitochondrial (mt) DNA transcription as well as a participant in mitochondrial genome replication. mtDNA is highly susceptible to oxidative stress leading to mitochondrial dysfunction. Overexpression of TFAM has been implicated in the amelioration of age dependent impairment of brain functions through the prevention of oxidative stress and mitochondrial dysfunction in microglia (Hayashi et al., 2008). More recently, TFAM overexpression has been shown to potentially reduce oxidative stress in motor neurons and delay onset of amyotrophic lateral sclerosis (ALS) in ALS model mice (Morimoto et al., 2012).

TFAM (Transcription Factor A, mitochondrial) Antibody - References

Hayashi Y, Yoshida M, Yamato M, Ide T, Wu Z, Ochi-Shindou M, Kanki T, Kang D, Sunagawa K, Tsutsui H, Nakanishi H (2008) Reverse of age-dependent memory impairment and mitochondrial DNA damage in microglia by an overexpression of human mitochondrial transcription factor a in mice. J Neurosci. 28(34):8624-34
Morimoto N, Miyazaki K, Kurata T, Ikeda Y, Matsuura T, Kang D, Ide T, Abe K (2012) Effect of mitochondrial transcription factor a overexpression on motor neurons in amyotrophic lateral sclerosis model mice. J Neurosci Res. 90(6):1200-8. Epub 2012 Feb 22

TFAM (Transcription Factor A, mitochondrial) Antibody - Citations

- Ciprofloxacin impairs mitochondrial DNA replication initiation through inhibition of Topoisomerase 2.