Anti-TFAM Antibody

Catalog Number: *PB0413*

BOSTER
antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
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Basic Information

Product Name	Anti-TFAM Antibody
Gene Name	TFAM
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, IHC, ICC/IF, IP
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human mtTFA different from the related mouse and rat sequences by five amino acids.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	24 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 ImmunoPrecipitation (IP): 1:250-300 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.

Storage

12 months from date of receipt，-20℃ as supplied. 6 months 2 to 8℃ after reconstitution. Avoid repeated freezing and thawing.

Background Information

TFAM (Transcription factor A, mitochondrial), also known as 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

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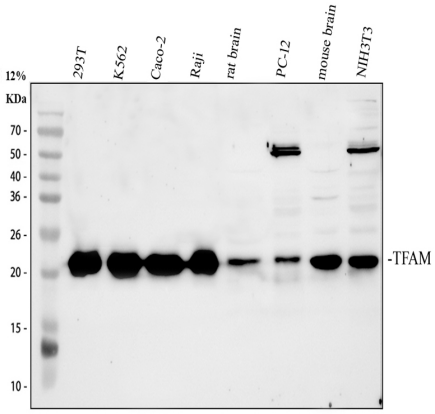
A gene (Tfam) to the central part of mouse chromosome 10. This region exhibits syntenic homology with human 10q21. Mitochondrial transcription factor A is a key activator of mitochondrial transcription in mammals. It also has a role in mitochondrial DNA replication, since transcription generates an RNA primer necessary for initiation of mtDNA replication.

Reference

Anti-TFAM Antibody被引用在7文献中。

Selected Validation Data



Western blot analysis of TFAM using anti-TFAM antibody (PB0413). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human 293T whole cell lysates,
Lane 2: human K562 whole cell lysates,
Lane 3: human Caco-2 whole cell lysates,
Lane 4: human Raji whole cell lysates,
Lane 5: rat brain tissue lysates,
Lane 6: rat PC-12 whole cell lysates,
Lane 7: mouse brian tissue lysates,
Lane 8: mouse NIH/3T3 whole cell lysates.
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-TFAM antigA03957-Aen affinity purified polyclonal antibody (PB0413) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TFAM at approximately 24 kDa. The expected band size for TFAM is at 29 kDa.

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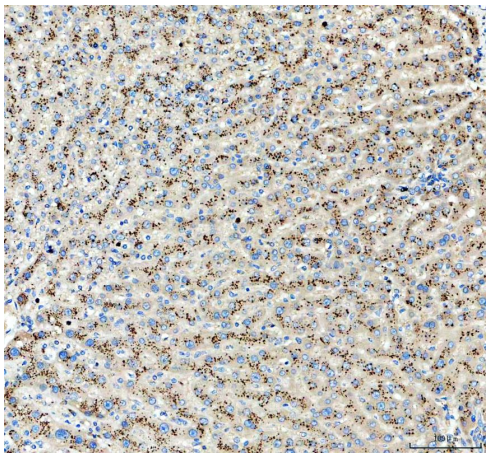
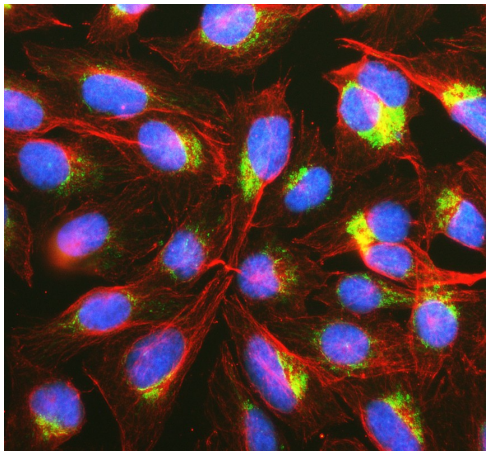
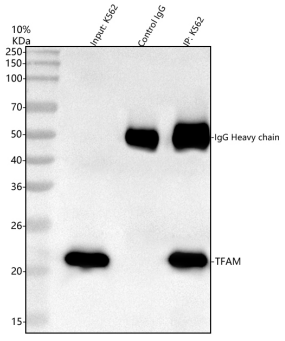


IHC analysis of TFAM using anti-TFAM antibody (PB0413).
TFAM was detected in a paraffin-embedded section of human liver cancer tissue. The tissue section was incubated with rabbit anti-TFAM Antibody (PB0413) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of TFAM using anti-TFAM antibody (PB0413) and anti-Beta Tubulin antibody (M01857-3).
TFAM was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-TFAM Antibody (PB0413) at a dilution of 1:100. Dylight488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog#BA1127) and Cy3-conjugated Anti-mouse IgG Secondary Antibody (red)(Catalog#BA1031) were used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



IP analysis of TFAM using anti-TFAM antibody (PB0413) in K562 whole cell lysate.
Western blot analysis of TFAM using anti- TFAM antibody (PB0413).
Lane 1: K562 whole cell lysates(30ug),
Lane 2: Rabbit control IgG instead of anti- TFAM antibody in K562 whole cell lysate,
Lane 3: anti- TFAM antibody (2µg) + K562 whole cell lysate (500µg).
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti- TFAM antigen affinity purified polyclonal antibody (PB0413) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TFAM at approximately 24 kDa. The expected band size for TFAM is at 29 kDa.

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