

Product Datasheet

mtTFA Antibody NBP2-19437

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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Publications: 8

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NBP2-19437

mtTFA Antibody

Product Information

Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.025% Proclin 300
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7), 20% Glycerol
Target Molecular Weight	29 kDa

Product Description

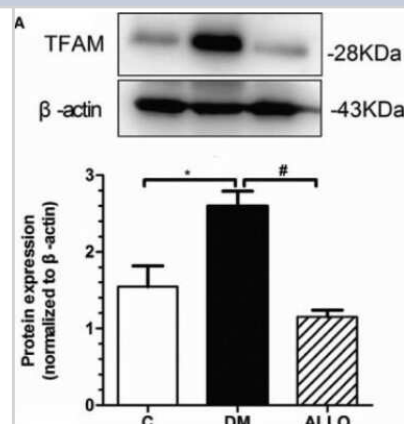
Host	Rabbit
Gene ID	7019
Gene Symbol	TFAM
Species	Human, Mouse, Rabbit
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 24603333). Use in Rabbit reported in scientific literature (PMID:29720500).
Immunogen	Recombinant protein encompassing a sequence within the center region of human mtTFA. The exact sequence is proprietary.

Product Application Details

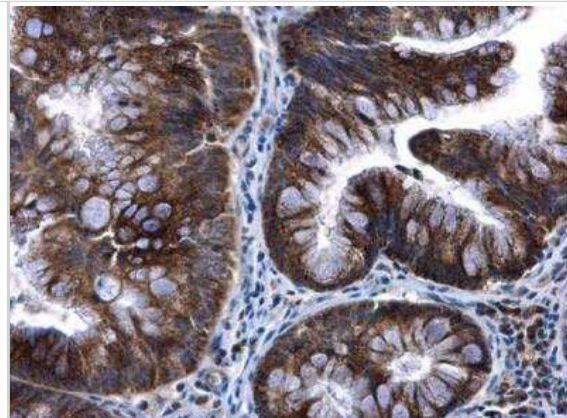
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1:500-1:3000, Immunohistochemistry 1:100-1:1000, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunoprecipitation 1:100-1:500, Immunohistochemistry-Paraffin 1:100-1:1000

Images

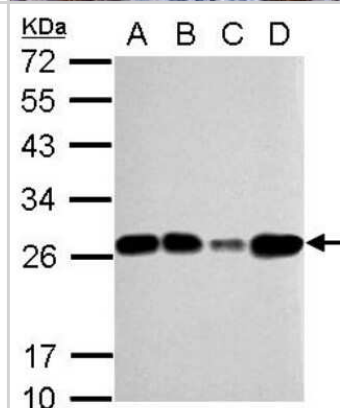
Western Blot: mtTFA Antibody [NBP2-19437] - Mitochondrial-related protein expression in LA tissue. Representative Western blot analysis of the protein expression in TFAM. Data is mean $\pm$ SD, relative protein level was normalized to beta-actin. *Compared with the control group P<0.05. #Compared with the DM group P<0.05. DM indicates diabetes mellitus; NS, not significant; TFAM, mitochondrial transcription factor A. Image collected and cropped by CiteAb from the following publication (www.ahajournals.org/doi/10.1161/JAHA.118.008807) licensed under a CC-BY license.



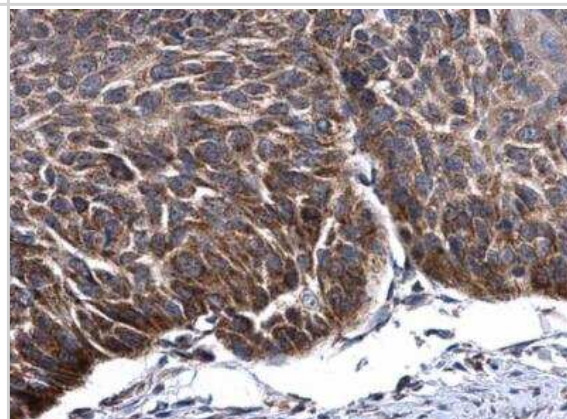
Immunohistochemistry-Paraffin: mtTFA Antibody [NBP2-19437] - Human colon cancer. mtTFA antibody diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



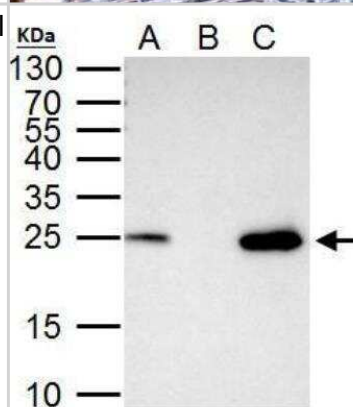
Western Blot: mtTFA Antibody [NBP2-19437] - Sample (30 ug of whole cell lysate) A: 293T B: A431 C: HeLa D: HepG2 12% SDS PAGE gel, diluted at 1:5000.



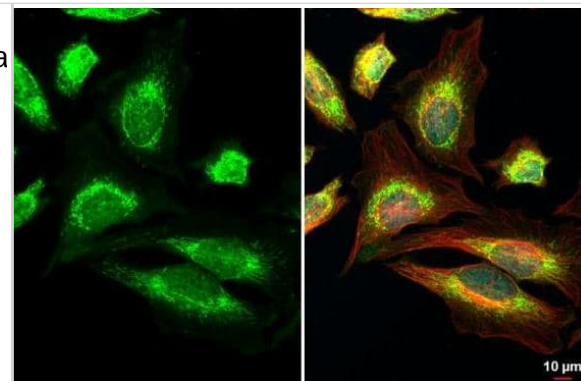
Immunohistochemistry-Paraffin: mtTFA Antibody [NBP2-19437] - Human esophagus cancer. mtTFA antibody diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



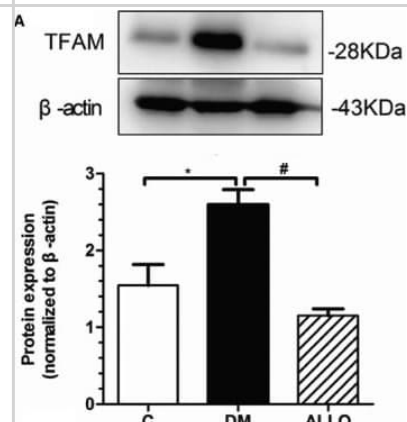
Immunoprecipitation: mtTFA Antibody [NBP2-19437] - A. 293T whole cell lysate/extract B. 40 ug 293T whole cell lysate/extract. C.. Control with 2 ug of preimmune rabbit IgG.



HeLa cells were fixed in 4% paraformaldehyde at RT for 15 min. Green: mtTFA stained by mtTFA antibody diluted at 1:500. Red: alpha Tubulin, a cytoskeleton marker, stained by alpha Tubulin antibody [114] diluted at 1:1000. Blue: Fluoroshield with DAPI.



Mitochondrial-related protein expression in LA tissue. A through D, Representative Western blot analysis of the protein expression in the 3 groups. (A) TFAM, (B) NRF1, (C) Drp1, (D) mfn1. Data are means $\pm$ SD, relative protein level was normalized to β -actin. *Compared with the control group $P < 0.05$. #Compared with the DM group $P < 0.05$. DM indicates diabetes mellitus; NS, not significant; TFAM, mitochondrial transcription factor A.



Publications

Li X, Flynn ER, do Carmo JM et al. Direct Cardiac Actions of Sodium-Glucose Cotransporter 2 Inhibition Improve Mitochondrial Function and Attenuate Oxidative Stress in Pressure Overload-Induced Heart Failure Frontiers in Cardiovascular Medicine 2022-05-12 [PMID: 35647080] (B/N)

Song Y, Yuan M, Zhang Z et al. Metformin protects diabetes-induced atrial mitochondrial from oxidative stress and improves mitochondrial biogenesis via the AMPK signaling pathway Research Square 2023-06-26 (WB, Rat)

Vijayan M, Reddy PH Reduced VDAC1, Maintained Mitochondrial Dynamics and Enhanced Mitochondrial Biogenesis in a Transgenic Tau Mouse Model of Alzheimer's Disease International journal of molecular sciences 2022-08-02 [PMID: 35955694] (IF/IHC, Mouse)

Details:

WB dilution used 1:1000, IHC dilution used 1:102

Huang Q, Wu D, Zhao J et al. TFAM loss induces nuclear actin assembly upon mDia2 malonylation to promote liver cancer metastasis The EMBO journal [PMID: 35451091]

Zhang Z, Zhang X, Meng L et al. Pioglitazone Inhibits Diabetes-Induced Atrial Mitochondrial Oxidative Stress and Improves Mitochondrial Biogenesis, Dynamics, and Function Through the PPAR-gamma/PGC-1 alpha Signaling Pathway Frontiers in Pharmacology 2021-06-14 [PMID: 34194324] (WB)

Yang Y, Zhao J et al. Xanthine Oxidase Inhibitor Allopurinol Prevents Oxidative Stress-Mediated Atrial Remodeling in Alloxan-Induced Diabetes Mellitus Rabbits. J Am Heart Assoc 2018-02-05 [PMID: 29720500] (WB, Rabbit, Mouse)

Yamanishi, K;Doe, N;Mukai, K;Ikubo, K;Hashimoto, T;Uwa, N;Sumida, M;El-Darawish, Y;Gamachi, N;Li, W;Kuwahara-Otani, S;Maeda, S;Watanabe, Y;Hayakawa, T;Yamanishi, H;Matsuyama, T;Yagi, H;Okamura, H;Matsunaga, H; Interleukin-18-deficient mice develop hippocampal abnormalities related to possible depressive-like behaviors Neuroscience 2019-04-11 [PMID: 30981863] (WB, Mouse)

Manczak M, Kandimalla R, Yin X, Hemachandra Reddy P. Mitochondrial division inhibitor 1 reduces dynamin-related protein 1 and mitochondrial fission activity. Hum. Mol. Genet. 2018-09-19 [PMID: 30239719] (WB, Mouse)



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Products Related to NBP2-19437

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NBP1-50977-0.01mg	Recombinant Human mtTFA His Protein

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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