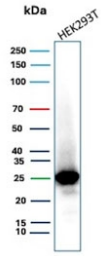
mtTFA Antibody | Mitochondrial transcription factor 1 / TFAM [clone TFAM/9713] (V5800)

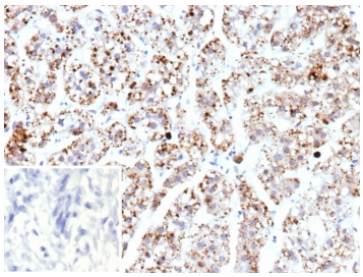
Catalog No.	Formulation	Size
V5800-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5800-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5800SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

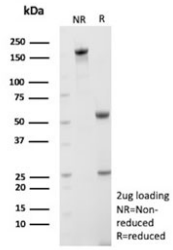
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG, kappa
Clone Name	TFAM/9713
Purity	Protein A/G affinity
UniProt	Q00059
Localization	Cytoplasm (Mitochondria)
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This mtTFA antibody is available for research use only.



Western blot testing of human HEK293T cell lysate with mtTFA antibody (clone TFAM/9713). Expected molecular weight: 24-29 kDa.



IHC staining of FFPE human adrenal gland tissue with mtTFA antibody (clone TFAM/9713). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free mtTFA antibody (clone TFAM/9713) as confirmation of integrity and purity.

Description

mtTFA (mitochondrial transcription factor A), also known as mtTF1, TFAM, TCF6 (for transcription factor 6-like1), TCF6L2 and tsHMG, is a nuclear-encoded gene product that is imported into the mitochondria. mtTFA is required for many aspects of mitochondrial biogenesis including the replication and transcription of mitochondrial DNA (mtDNA). In mouse, testis-specific mtTFA is missing the mitochondria targeting sequence and is present in the nucleus rather than the mitochondria. This form of mtTFA is located primarily in the nuclei of elongated spermatids and may be involved in the regulation of gene expression of the haploid male genome. During mouse and human spermatogenesis there is a reduction of mtTFA protein levels and a reduction in mtDNA copy number. These features may provide one of the mechanisms by which paternal mtDNA transmission is prevented. mtTFA has been associated with mitochondrial disorder in humans characterized by ocular myopathy, exercise intolerance and muscle wasting.

Application Notes

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

Immunogen

A portion of amino acids 1-200 from human Mitochondrial transcription factor 1 protein was used as the immunogen for the mtTFA antibody.

Storage

Aliquot the mtTFA antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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