10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TFB2M Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10145b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9H5Q4
Other Accession	NP_071761.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22408
Calculated MW	45349
Antigen Region	368-396

Additional Information

Gene ID	64216
Other Names	Dimethyladenosine transferase 2, mitochondrial, 211-, Hepatitis C virus NS5A-transactivated protein 5, HCV NS5A-transactivated protein 5, Mitochondrial 12S rRNA dimethylase 2, Mitochondrial transcription factor B2, h-mtTFB, h-mtTFB2, hTFB2M, mtTFB2, S-adenosylmethionine-6-N', N'-adenosyl(rRNA) dimethyltransferase 2, TFB2M, NS5ATP5
Target/Specificity	This TFB2M antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 368-396 amino acids from the C-terminal region of human TFB2M.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TFB2M Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

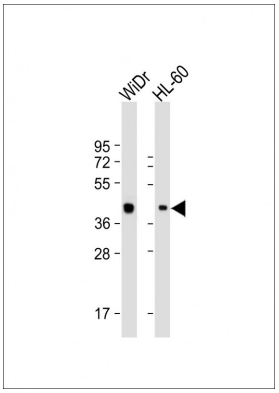
Name	TFB2M (HGNC:18559)

Synonyms	NS5ATP5
Function	S-adenosyl-L-methionine-dependent rRNA methyltransferase which may methylate two specific adjacent adenosines in the loop of a conserved hairpin near the 3'-end of 12S mitochondrial rRNA (Probable). Component of the mitochondrial transcription initiation complex, composed at least of TFB2M, TFAM and POLRMT that is required for basal transcription of mitochondrial DNA (PubMed:12068295, PubMed:15526033, PubMed:20410300, PubMed:29149603). In this complex, TFAM recruits POLRMT to a specific promoter whereas TFB2M induces structural changes in POLRMT to enable promoter opening and trapping of the DNA non- template strand (PubMed:15526033, PubMed:29149603). Stimulates transcription independently of the methyltransferase activity (PubMed:12897151).
Cellular Location	Mitochondrion.
Tissue Location	Ubiquitously expressed.

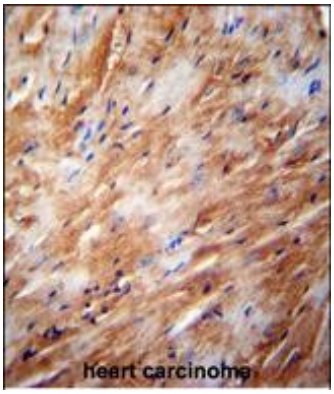
References

Litonin, D., et al. J. Biol. Chem. 285(24):18129-18133(2010)
Norrbom, J., et al. Acta Physiol (Oxf) 198(1):71-79(2010)
Fukuoh, A., et al. Genes Cells 14(8):1029-1042(2009)
Cotney, J., et al. Hum. Mol. Genet. 18(14):2670-2682(2009)
Alonso-Montes, C., et al. Dis. Markers 25(3):131-139(2008)

Images



All lanes : Anti-TFB2M Antibody (C-term) at 1:2000 dilution Lane 1: WiDr whole cell lysate Lane 2: HL-60 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



TFB2M Antibody (C-term) (Cat. #AP10145b) immunohistochemistry analysis in formalin fixed and paraffin embedded human heart carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the TFB2M Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Mitochondrial transcription factor B2 overexpression increases M2 macrophage infiltration via cytosolic mitochondrial DNA-stimulated Interleukin-6 secretion in ovarian cancer
- Suppression of mitochondrial transcription initiation complexes changes the balance of replication intermediates of mitochondrial DNA and reduces 7S DNA in cultured human cells.