

TFB1M (X-22): sc-134077

BACKGROUND

TFB1M (transcription factor B1, mitochondrial), also known as CGI75, mtTFB or CGI-75, is a 346 amino acid mitochondrial protein that, along with mtTFA and MtrPOL, is required for the transcription of genes from mitochondrial DNA. Expressed ubiquitously, TFB1M functions as an S-adenosyl-L-methionine-dependent methyltransferase that specifically dimethylates mitochondrial 12S rRNA at the conserved stem loop and is required for mitochondrial DNA transcription. Variations in the gene encoding TFB1M are thought to influence the pathogenesis of aminoglycoside-induced deafness (AID), a disorder that is characterized by hearing loss and is caused by irregular methylation of 12S rRNA. The gene encoding TFB1M maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome.

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RESEARCH USE

For research use only, not for use in diagnostic procedures.

CHROMOSOMAL LOCATION

Genetic locus: TFB1M (human) mapping to 6q25.3.

SOURCE

TFB1M (X-22) is a Protein A purified rabbit polyclonal antibody raised against synthetic TFB1M peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

TFB1M (X-22) is recommended for detection of TFB1M of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TFB1M siRNA (h): sc-95185, TFB1M shRNA Plasmid (h): sc-95185-SH and TFB1M shRNA (h) Lentiviral Particles: sc-95185-V.

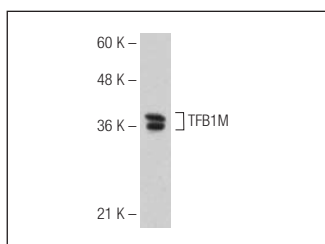
Molecular Weight of TFB1M: 40 kDa.

Positive Controls: 721 B whole cell lysate.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



TFB1M (X-22): sc-134077. Western blot analysis of TFB1M expression in 721 B whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.