

EF-Ts (m): 293T Lysate: sc-119940

BACKGROUND

EF-Ts, also known as TSFM (Ts translation elongation factor, mitochondrial) or COXPD3, is a 325 amino acid protein that is one of 13 mitochondrial-encoded proteins that work together during the elongation phase of protein biosynthesis on the ribosome. Expressed ubiquitously, with highest levels present in liver, kidney and skeletal muscle, EF-Ts associates with EF-Tu, a multi-domain GTPase with essential functions in translation, and, via this interaction, facilitates the exchange of GDP for GTP, thereby inducing protein elongation. Mutations in the gene encoding EF-Ts are the cause of combined oxidative phosphorylation deficiency type 3 (COXPD3), a condition characterized by defects in the mitochondrial oxidative phosphorylation system and often characterized by severe metabolic acidosis with encephalomyopathy or with hypertrophic cardiomyopathy. Multiple isoforms of EF-Ts exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Tsfm (mouse) mapping to 10 D3.

PRODUCT

EF-Ts (m): 293T Lysate represents a lysate of mouse EF-Ts transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

EF-Ts (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive EF-Ts antibodies. Recommended use: 10-20 µl per lane.

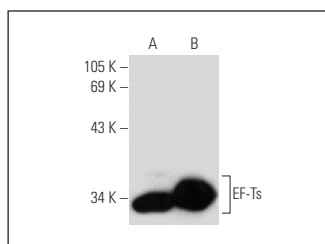
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

EF-Ts (A-10): sc-271588 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse EF-Ts expression in EF-Ts transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



EF-Ts (A-10): sc-271588. Western blot analysis of EF-Ts expression in non-transfected: sc-117752 (A) and mouse EF-Ts transfected: sc-119940 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.