

EF-Ts (H-290): sc-98690

BACKGROUND

EF-Ts, also known as TSMF (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 multidomain 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: TSMF (human) mapping to 12q14.1; Tsmf (mouse) mapping to 10 D3.

SOURCE

EF-Ts (H-290) is a rabbit polyclonal antibody raised against amino acids 36-325 mapping at the C-terminus of EF-Ts of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

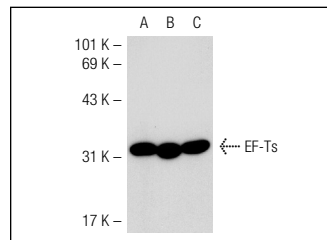
EF-Ts (H-290) is recommended for detection of EF-Ts of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for EF-Ts siRNA (h): sc-77243, EF-Ts siRNA (m): sc-77244, EF-Ts shRNA Plasmid (h): sc-77243-SH, EF-Ts shRNA Plasmid (m): sc-77244-SH, EF-Ts shRNA (h) Lentiviral Particles: sc-77243-V and EF-Ts shRNA (m) Lentiviral Particles: sc-77244-V.

Molecular Weight of EF-Ts: 34 kDa.

Positive Controls: EF-Ts (m): 293T Lysate: sc-119940 or HeLa whole cell lysate: sc-2200.

DATA



EF-Ts (H-290): sc-98690. Western blot analysis of EF-Ts expression in non-transfected 293T: sc-117752 (A), mouse EF-Ts transfected 293T: sc-119940 (B) and HeLa (C) whole cell lysates.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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



Try **EF-Ts (A-10): sc-271588**, our highly recommended monoclonal alternative to EF-Ts (H-290).