

Tim21L (F-13): sc-85179

BACKGROUND

The majority of mitochondrial-directed proteins are encoded by the nuclear genome and are transported to the mitochondria via regulated processes involving the mitochondrial Tom and Tim proteins. The mitochondrial Tim protein family is comprised of a large group of evolutionarily conserved proteins that are found in most eukaryotes and are thought to play a role in health and development. Tim21L (Tim21-like protein, mitochondrial), also known as C18orf55, is a 248 amino acid single-pass membrane protein that is thought to play a role in the transport of transit peptide-containing proteins across the inner mitochondrial membrane. The gene encoding Tim21L maps to human chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include Trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TIMM21 (human) mapping to 18q22.3; 1700034H14Rik (mouse) mapping to 18 E4.

SOURCE

Tim21L (F-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Tim21L of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-85179 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Tim21L (F-13) is recommended for detection of Tim21L of human origin, 1700034H14Rik of mouse origin and the corresponding rat homolog Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Tim21L (F-13) is also recommended for detection of Tim21L in additional species, including avian.

Suitable for use as control antibody for Tim21L siRNA (h): sc-76668, Tim21L shRNA Plasmid (h): sc-76668-SH and Tim21L shRNA (h) Lentiviral Particles: sc-76668-V.

Molecular Weight of Tim21L: 28 kDa.

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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

STORAGE

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

PROTOCOLS

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