

Tom5 (P-13): sc-244481

BACKGROUND

The mitochondrial preprotein translocases of the outer membrane (Tom) form a multisubunit complex that facilitates the import of nuclear-encoded precursor proteins across the mitochondrial outer membrane. The Tom machinery consists of import receptors for the initial binding of cytosolically synthesized preproteins, and a general import pore (GIP) for the membrane translocation of various preproteins into the mitochondrion. Tom5 (translocase of outer mitochondrial membrane 5 homolog (yeast)), also known as C9orf105, is a 51 amino acid protein that belongs to the Tom5 family. Localizing to the mitochondrial outer membrane, Tom5 forms part of the preprotein translocase complex of the outer mitochondrial membrane (TOM complex). Tom5 is encoded by a gene located on human chromosome 9p13.2 and mouse chromosome 4 B1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TOMM5 (human) mapping to 9p13.2; Tom5 (mouse) mapping to 4 B1.

SOURCE

Tom5 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Tom5 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.

Blocking peptide available for competition studies, sc-244481 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Tom5 (P-13) is recommended for detection of Tom5 of mouse, rat and human origin by 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).

Tom5 (P-13) is also recommended for detection of Tom5 in additional species, including porcine.

Suitable for use as control antibody for Tom5 siRNA (m): sc-108162, Tom5 shRNA Plasmid (m): sc-108162-SH and Tom5 shRNA (m) Lentiviral Particles: sc-108162-V.

Molecular Weight of Tom5: 6 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.