

Tom1L-2 (C-18): sc-69632

BACKGROUND

Tom1L-2 (target of myb1-like 2), also known as TOM1L2, TOM1-like protein 2 or target of Myb-like protein 2, is a 507 amino acid protein belonging to the TOM1 family. Encoded by a gene that maps to human chromosome 17p11.2, Tom1L-2 is ubiquitously expressed, with higher expression in heart and skeletal muscle, and may play a role in protein transport and cellular trafficking. Existing as four alternatively spliced isoforms, Tom1L-2 interacts with clathrin, SRC and Tollip. Tom1L-2 contains two domains, the GAT domain, which mediates interaction with Tollip, and the VHS domain, both of which are involved in vesicular trafficking. Tom1L-2 associates with SRC when coexpressed in HEK 293 cells. Tom1L-2 also associates with SRC when overexpressed, thereby affecting SFK mitogenic signaling induced by growth factors. Myc expression substantially reverses mitogenic inhibition induced by Tom1L-2. Tom1L-2 may be associated with dementia, SMS (Smith-Magenis syndrome), immunological responses and tumor suppression.

REFERENCES

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5. Franco, M., Furstoss, O., Simon, V., Benistant, C., Hong, W.J. and Roche, S. 2006. The adaptor protein Tom1L1 is a negative regulator of Src mitogenic signaling induced by growth factors. *Mol. Cell. Biol.* 26: 1932-1947.

CHROMOSOMAL LOCATION

Genetic locus: TOM1L2 (human) mapping to 17p11.2; Tom1I2 (mouse) mapping to 11 B2.

SOURCE

Tom1L-2 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Tom1L-2 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-69632 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Tom1L-2 (C-18) is recommended for detection of Tom1L-2 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).

Tom1L-2 (C-18) is also recommended for detection of Tom1L-2 in additional species, including equine and canine.

Suitable for use as control antibody for Tom1L-2 siRNA (h): sc-76710, Tom1L-2 siRNA (m): sc-76711, Tom1L-2 shRNA Plasmid (h): sc-76710-SH, Tom1L-2 shRNA Plasmid (m): sc-76711-SH, Tom1L-2 shRNA (h) Lentiviral Particles: sc-76710-V and Tom1L-2 shRNA (m) Lentiviral Particles: sc-76711-V.

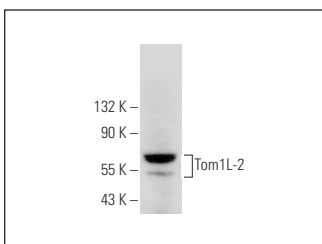
Molecular Weight of Tom1L-2: 56 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or rat heart extract: sc-2393.

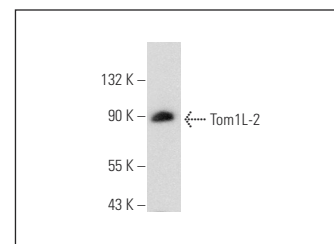
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Tom1L-2 (C-18): sc-69632. Western blot analysis of Tom1L-2 expression in rat heart tissue extract.



Tom1L-2 (C-18): sc-69632. Western blot analysis of Tom1L-2 expression in A431 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.

RESEARCH USE

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