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TUG (m): 293T Lysate: sc-126165

BACKGROUND

Glut4 is a twelve pass transmembrane protein (12TM) whose carboxy-terminus may dictate its cellular localization. Aberrant Glut4 expression has been suggested to contribute to such maladies as obesity and diabetes. Glut4 null mice have shown that while functional Glut4 protein is not required for maintaining normal glucose levels, it is necessary for sustained growth, normal cellular glucose, fat metabolism and prolonged longevity. TUG (ASPL in humans) regulates the trafficking of glucose via Glut4. Full-length TUG forms a complex with Glut4 and in 3T3-L1 adipocytes and this complex is present in unstimulated cells and is disassembled by Insulin. TUG acts by trapping endocytosed Glut4 and tethering it intracellularly. Insulin mobilizes this pool of retained Glut4 by releasing the tether.

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CHROMOSOMAL LOCATION

Genetic locus: Aspscr1 (mouse) mapping to 11 E2.

PRODUCT

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

APPLICATIONS

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

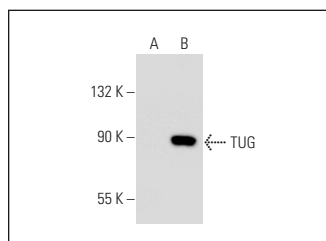
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TUG (4A11A6G11): sc-53952 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse TUG expression in TUG 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



TUG (4A11A6G11): sc-53952. Western blot analysis of TUG expression in non-transfected: sc-117752 (A) and mouse TUG transfected: sc-126165 (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.

RESEARCH USE

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

PROTOCOLS

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