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Product datasheet for AP17891PU-N

TUG (ASPSCR1) (C-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	ELISA: 1/1,000. Western blot: 1/100~1/500.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide selected from the C-terminal region of Human ASPSCR1.
Specificity:	This antibody is specific to ASPSCR1/TUG (C-term).
Formulation:	PBS containing 0.09% (W/V) Sodium Azide as preservative. State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Protein A Chromatography followed by peptide affinity purification.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	ASPSCR1, UBX domain containing tether for SLC2A4
Database Link:	Entrez Gene 79058 Human Q9BZE9

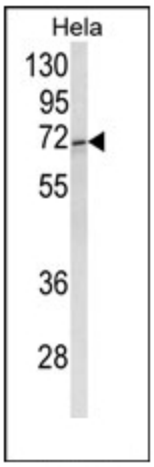
View online »

Background: ASPSCR1 is tethering protein that sequesters GLUT4-containing vesicles in the cytoplasm in the absence of insulin. Modulates the amount of GLUT4 that is available at the cell surface. Insulin stimulates glucose uptake in fat and muscle by mobilizing the GLUT4 glucose transporter. GLUT4 is sequestered intracellularly in the absence of insulin, and is redistributed to the plasma membrane within minutes of insulin stimulation. Bogan et al. (2003) described a functional screen to identify proteins that modulate GLUT4 distribution, and identified TUG as a putative tether, containing a UBX domain, for GLUT4. They identified the ASPL protein as the probable human homolog of murine TUG. In truncated form, TUG acts in a dominant-negative manner to inhibit insulin-stimulated GLUT4 redistribution in Chinese hamster ovary cells and 3T3-L1 adipocytes. Full-length TUG forms a complex specifically with GLUT4; in 3T3-L1 adipocytes, this complex is present in unstimulated cells and is largely disassembled by insulin. Endogenous TUG is localized with the insulin-mobilizable pool of GLUT4 in unstimulated 3T3-L1 adipocytes, and is not mobilized to the plasma membrane by insulin. Distinct regions of TUG are required to bind GLUT4 and to retain GLUT4 intracellularly in transfected, nonadipose cells. Bogan et al. (2003) concluded that TUG traps endocytosed GLUT4 and tethers it intracellularly, and that insulin mobilizes this pool of retained GLUT4 by releasing this tether. Bogan et al. (2003) found that TUG exists in 2 isoforms, the longer of which contains a sequence at the amino terminus with similarity to ubiquitin that is predicted to be 550 residues long. The probable start codon in the short form is equivalent to methionine-78 of the long form.

Synonyms: ASPL, RCC17, TUG, UBXD9, UBXN9

Note: Calculated MW: 69,990 Da (Isoform 2)

Product images:



Western blot analysis of ASPSCR1/TUG Antibody (C-term) in Hela cell line lysates (35ug/lane). ASPSCR1 (arrow) was detected using the purified Pab.