

UAP1L1 (G-14): sc-249193

BACKGROUND

UDP-GlcNAc (UDP-N-acetylglucosamine) is a coenzyme in metabolism that is used for making proteoglycans, glycosaminoglycans and glycolipids. UDP-GlcNAc is also involved in intracellular and nuclear signaling, nuclear pore formation and may be part of the glucose sensing mechanism in pancreas beta-cells. UAP1 (UDP-N-acetylhexosamine pyrophosphorylase) catalyzes the final step of UDP-GlcNAc biosynthesis from fructose-6-phosphate. In sperm, UAP1 localizes to the principle piece of the tail, neck region of the head and midpiece of the tail. Antibodies against UAP1 have been discovered in infertile patients sera, suggesting that this immune-complex may affect sperm function. UAP1L1 (UDP-N-acetylhexosamine pyrophosphorylase-like protein 1) is a 507 amino acid protein that shares sequence similarity with UAP1. There are two isoforms of UAP1L1 that are produced as a result of alternatively splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Uap111 (mouse) mapping to 2 A3.

SOURCE

UAP1L1 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UAP1L1 of mouse 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-249193 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UAP1L1 (G-14) is recommended for detection of UAP1L1 of mouse and rat 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); non cross-reactive with UAP1.

Suitable for use as control antibody for UAP1L1 siRNA (m): sc-154838, UAP1L1 shRNA Plasmid (m): sc-154838-SH and UAP1L1 shRNA (m) Lentiviral Particles: sc-154838-V.

Molecular Weight of UAP1L1 isoform 1/2: 57/43 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.