

GPSN2 (L-12): sc-168030

BACKGROUND

GPSN2 (glycoprotein, synaptic 2), also known as TER or SC2, is a 308 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and belongs to the steroid 5- α reductase family. Expressed in a variety of tissues with highest expression in skeletal muscle, GPSN2 catalyzes the final step in the elongation of long and very long chain microsomal fatty acids, namely the reduction of trans-2,3-enoyl-CoA to saturated acyl-CoA. Human GPSN2 shares 95% sequence identity with its mouse counterpart, suggesting a conserved role between species. The gene encoding GPSN2 maps to human chromosome 19 and is expressed as multiple alternatively spliced isoforms. Chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs).

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CHROMOSOMAL LOCATION

Genetic locus: TECR (human) mapping to 19p13.12; Tecr (mouse) mapping to 8 C2.

SOURCE

GPSN2 (L-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GPSN2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168030 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPSN2 (L-12) is recommended for detection of GPSN2 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).

GPSN2 (L-12) is also recommended for detection of GPSN2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GPSN2 siRNA (h): sc-97406, GPSN2 siRNA (m): sc-145745, GPSN2 shRNA Plasmid (h): sc-97406-SH, GPSN2 shRNA Plasmid (m): sc-145745-SH, GPSN2 shRNA (h) Lentiviral Particles: sc-97406-V and GPSN2 shRNA (m) Lentiviral Particles: sc-145745-V.

Molecular Weight of GPSN2: 36 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.