BACKGROUND

Mutation of Ob (Obesity factor), also known as leptin precursor, results in profound obesity and type II diabetes as part of a syndrome that resembles morbid obesity in humans. The Ob gene product may function as a component of a signaling pathway in adipose tissue that functions to regulate body fat. The leptin receptor, designated Ob-R, has been shown to be a single membrane-spanning receptor that most resembles the gp130 signal transducing component of the IL-6, G-CSF and LIF receptor. LEPROT (leptin receptor overlapping transcript), also known as LEPR, VPS55 or OBRGRP, is a 131 amino acid multi-pass membrane protein that is highly expressed in placenta and heart and may play a role in energy homeostasis and body weight control. The gene encoding LEPROT maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: LEPROT (human) mapping to 1p31.3; Leprot (mouse) mapping to 4 C6.

SOURCE

LEPROT (V-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LEPROT 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-103596 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LEPROT (V-15) is recommended for detection of LEPROT 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); non cross-reactive with LEPROT-L1.

Suitable for use as control antibody for LEPROT siRNA (h): sc-88262, LEPROT siRNA (m): sc-105612, LEPROT shRNA Plasmid (h): sc-88262-SH, LEPROT shRNA Plasmid (m): sc-105612-SH, LEPROT shRNA (h) Lentiviral Particles: sc-88262-V and LEPROT shRNA (m) Lentiviral Particles: sc-105612-V.

Molecular Weight of LEPROT: 14 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-HP: 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 Luminal 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.