

LSR (D-14): sc-168484

BACKGROUND

LSR (lipolysis stimulated lipoprotein receptor), also known as ILDR3 or LISCH7, is a 649 amino acid single-pass membrane protein that contains one immunoglobulin-like domain and localizes to the cell membrane. Existing as a homotrimer or a homotetramer, LSR is thought to play a role in the clearing of triglyceride-rich lipoproteins from blood, specifically via binding to low density lipoproteins (LDLs) and very low density lipoproteins (VLDLs) and facilitating their uptake into cells. Overexpression of LSR may be associated with increased colon tumor growth, suggesting an involvement for LSR in tumor formation and metastasis. Multiple isoforms of LSR exist due to alternative splicing events. The gene encoding LSR maps to human 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.

REFERENCES

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3. Kim, J.E., et al. 2005. Global phosphoproteome of HT-29 human colon adenocarcinoma cells. *J. Proteome Res.* 4: 1339-1346.
4. García, J.M., et al. 2007. Prognostic value of LISCH7 mRNA in plasma and tumor of colon cancer patients. *Clin. Cancer Res.* 13: 6351-6358.
5. Herbsleb, M., et al. 2008. Increased cell motility and invasion upon knock-down of lipolysis stimulated lipoprotein receptor (LSR) in SW780 bladder cancer cells. *BMC Med. Genomics* 1: 31.
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7. Voshol, P.J., et al. 2009. Effect of plasma triglyceride metabolism on lipid storage in adipose tissue: Studies using genetically engineered mouse models. *Biochim. Biophys. Acta.* E-Published.
8. Narvekar, P., et al. 2009. Liver-specific loss of lipolysis-stimulated lipoprotein receptor triggers systemic hyperlipidemia in mice. *Diabetes.* E-Published.

CHROMOSOMAL LOCATION

Genetic locus: LSR (human) mapping to 19q13.3; Lsr (mouse) mapping to 7 B1.

SOURCE

LSR (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of LSR of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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-168484 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LSR (D-14) is recommended for detection of LSR 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).

LSR (D-14) is also recommended for detection of LSR in additional species, including equine and bovine.

Suitable for use as control antibody for LSR siRNA (h): sc-97082, LSR siRNA (m): sc-149135, LSR shRNA Plasmid (h): sc-97082-SH, LSR shRNA Plasmid (m): sc-149135-SH, LSR shRNA (h) Lentiviral Particles: sc-97082-V and LSR shRNA (m) Lentiviral Particles: sc-149135-V.

Molecular Weight of LSR: 71 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.

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.