SANTA CRUZ BIOTECHNOLOGY, INC.

Angptl4 (L-17): sc-32186



BACKGROUND

Angiopoietin-like 4 (Angptl4), also designated hepatic fibrinogen/angiopoietinrelated protein (HFARP), is a secreted protein which, through an endocrine action, exerts a protective function over endothelial cells. The Angptl4 gene has hypoxia-induced expression in endothelial cells. Angptl4 has a highly hydrophobic region at the N-terminus that is typical of a secretory signal sequence and one consensus glycosylation site. Angptl4 is considered a marker of renal cell carcinoma (other renal tumor cells do not produce Angptl4 mRNA). Evidence suggests that Angptl4 is a blood-borne hormone directly involved in regulating glucose homeostasis, lipid metabolism and Insulin sensitivity. Angptl4 exerts distinct effects on glucose and lipid metabolism, and may be useful for the treatment of diabetes.

REFERENCES

- Kim, I., et al. 2000. Hepatic expression, synthesis and secretion of a novel fibrinogen/angiopoietin-related protein that prevents endothelial cell apoptosis. Biochem. J. 346: 603-610.
- Li, K.Q., et al. 2004. Anti-tumor effect of recombinant retroviral vectormediated human Angptl4 gene transfection. Chin. Med. J. 117: 1364-1369.
- Ge, H., et al. 2005. Differential regulation and properties of angiopoietinlike proteins 3 and 4. J. Lipid Res. 46: 1484-1490.
- Yu, X., et al. 2005. Inhibition of cardiac lipoprotein utilization by transgenic overexpression of Angptl4 in the heart. Proc. Natl. Acad. Sci. USA 102: 1767-1772.
- Xu, A., et al. 2005. Angiopoietin-like protein 4 decreases blood glucose and improves glucose tolerance but induces hyperlipidemia and hepatic steatosis in mice. Proc. Natl. Acad. Sci. USA 102: 6086-6091.

CHROMOSOMAL LOCATION

Genetic locus: ANGPTL4 (human) mapping to 19p13.2; Angptl4 (mouse) mapping to 17 B1.

SOURCE

Angptl4 (L-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Angptl4 of mouse origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-32186 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

Angptl4 (L-17) is recommended for detection of Angptl4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Angptl4 (L-17) is also recommended for detection of Angptl4 in additional species, including bovine and porcine.

Suitable for use as control antibody for Angptl4 siRNA (h): sc-44664, Angptl4 siRNA (m): sc-44665, Angptl4 shRNA Plasmid (h): sc-44664-SH, Angptl4 shRNA Plasmid (m): sc-44665-SH, Angptl4 shRNA (h) Lentiviral Particles: sc-44664-V and Angptl4 shRNA (m) Lentiviral Particles: sc-44665-V.

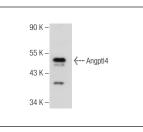
Molecular Weight of Angptl4: 50 kDa.

Positive Controls: mouse liver extract: sc-2256, c4 whole cell lysate: sc-364186 or HeLa whole cell lysate: sc-2200.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Angptl4 (L-17): sc-32186. Western blot analysis of Angptl4 expression in HeLa whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.



Try Angptl4 (A-2): sc-373761 or Angptl4 (C-7): sc-373762, our highly recommended monoclonal alternatives to Angptl4 (L-17).