

Angptl3 (G-5): sc-365887

BACKGROUND

Angiotensin-like protein 3 (Angptl3) functions as a potent lipoprotein lipase inhibitor and is an important component of plasma triglyceride homeostasis. Angptl3 also plays a role in adipose formation and angiogenesis through its interaction with Integrin $\alpha\beta 3$. It is secreted by the liver and is functionally defined by the C-terminal Fibrinogen (FBN)-like domain and an N-terminal coiled-coil domain. Angptl3 regulates circulating triglyceride levels during different nutritional states thereby mediating the feeding/fasting cycle. A deficiency of Angptl3 results in abnormally low lipid levels and a repression of the protein may be protective against atherosclerosis. Angptl3 may also play an important role in hyperlipidemia in diabetes.

REFERENCES

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- Shimizu-gawa, T., et al. 2004. Angptl3 (angiotensin-like 3). *Nippon Rinsho* 62: 1170-1174.
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- Fugier, C., et al. 2006. The lipoprotein lipase inhibitor Angptl3 is negatively regulated by thyroid hormone. *J. Biol. Chem.* 281: 11553-11559.

CHROMOSOMAL LOCATION

Genetic locus: ANGPTL3 (human) mapping to 1p31.3.

SOURCE

Angptl3 (G-5) is a mouse monoclonal antibody raised against amino acids 53-300 mapping within an internal region of Angptl3 of human origin.

PRODUCT

Each vial contains 200 μg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Angptl3 (G-5) is available conjugated to agarose (sc-365887 AC), 500 μg /0.25 ml agarose in 1 ml, for IP; to HRP (sc-365887 HRP), 200 $\mu\text{g}/\text{ml}$, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365887 PE), fluorescein (sc-365887 FITC), Alexa Fluor® 488 (sc-365887 AF488), Alexa Fluor® 546 (sc-365887 AF546), Alexa Fluor® 594 (sc-365887 AF594) or Alexa Fluor® 647 (sc-365887 AF647), 200 $\mu\text{g}/\text{ml}$, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365887 AF680) or Alexa Fluor® 790 (sc-365887 AF790), 200 $\mu\text{g}/\text{ml}$, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Angptl3 (G-5) is recommended for detection of Angptl3 of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Angptl3 siRNA (h): sc-61911, Angptl3 shRNA Plasmid (h): sc-61911-SH and Angptl3 shRNA (h) Lentiviral Particles: sc-61911-V.

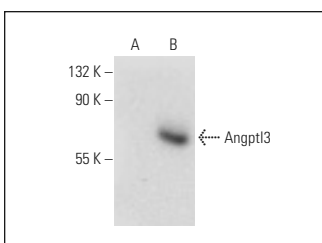
Molecular Weight of Angptl3: 63 kDa.

Positive Controls: human liver extract: sc-363766 or human Angptl3 transfected HEK293T whole cell lysate.

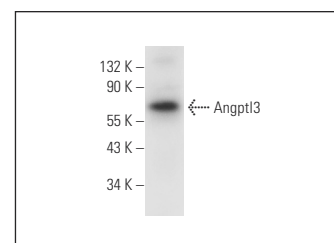
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Angptl3 (G-5): sc-365887. Western blot analysis of Angptl3 expression in non-transfected (A) and human Angptl3 transfected (B) HEK293T whole cell lysates.



Angptl3 (G-5): sc-365887. Western blot analysis of Angptl3 expression in human liver tissue extract.

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 for detailed protocols and support products.

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