

# Angptl6 (A-12): sc-160957

## BACKGROUND

Angptl6 (angiopoietin-like 6), also known as AGF or ARP5, is a 470 amino acid secreted protein that contains one Fibrinogen C-terminal domain and is a member of the angiopoietin-like family. Expressed abundantly in liver and present at lower levels in testis, kidney, heart, brain and lung, Angptl6 plays a role in wound healing and is also thought to promote neovascularization and enhance the chemotactic activity of endothelial cells. Additionally, Angptl6 may be involved in epidermal proliferation, remodeling and regeneration and may be able to counteract obesity by increasing energy expenditure. Human Angptl6 shares 74% amino acid identity with its mouse counterpart, suggesting a conserved role between species. The gene encoding Angptl6 maps to human chromosome 19, which is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (Fc Rs).

## REFERENCES

- Oike, Y., et al. 2003. Angiopoietin-related growth factor (AGF) promotes epidermal proliferation, remodeling, and regeneration. *Proc. Natl. Acad. Sci. USA* 100: 9494-9499.
- Oike, Y., et al. 2004. Angiopoietin-related growth factor (AGF) promotes angiogenesis. *Blood* 103: 3760-3765.
- Oike, Y., et al. 2005. Angiopoietin-related growth factor antagonizes obesity and Insulin resistance. *Nat. Med.* 11: 400-408.
- Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609336. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Zhang, Y., et al. 2006. Angiopoietin-related growth factor (AGF) supports adhesion, spreading, and migration of keratinocytes, fibroblasts, and endothelial cells through interaction with RGD-binding integrins. *Biochem. Biophys. Res. Commun.* 347: 100-108.
- Hato, T., et al. 2008. The role of angiopoietin-like proteins in angiogenesis and metabolism. *Trends Cardiovasc. Med.* 18: 6-14.

## CHROMOSOMAL LOCATION

Genetic locus: ANGPTL6 (human) mapping to 19p13.2; Angptl6 (mouse) mapping to 9 A3.

## SOURCE

Angptl6 (A-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Angptl6 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## 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-160957 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Angptl6 (A-12) is recommended for detection of Angptl6 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); non cross-reactive with other Angpt family members.

Angptl6 (A-12) is also recommended for detection of Angptl6 in additional species, including canine.

Suitable for use as control antibody for Angptl6 siRNA (h): sc-97470, Angptl6 siRNA (m): sc-141062, Angptl6 shRNA Plasmid (h): sc-97470-SH, Angptl6 shRNA Plasmid (m): sc-141062-SH, Angptl6 shRNA (h) Lentiviral Particles: sc-97470-V and Angptl6 shRNA (m) Lentiviral Particles: sc-141062-V.

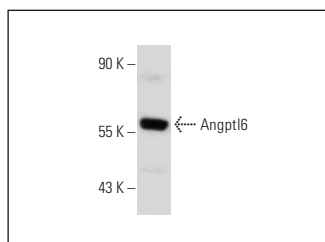
Molecular Weight of Angptl6: 50 kDa.

Positive Controls: mouse brain extract: sc-2253.

## 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



Angptl6 (A-12): sc-160957. Western blot analysis of Angptl6 expression in mouse brain tissue extract.

## RESEARCH USE

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