

Angptl2 (P-13): sc-107143

BACKGROUND

Angptl2 (angiopoietin-like 2), also known as angiopoietin-related protein 2 (ARP2), is a member of the Fibrinogen superfamily. It is expressed in adult heart, stomach, spleen and small intestine tissues. Angptl2 consists of an N-terminus with a conserved coiled-coil domain, two glycosylation sites and a C-terminus with a conserved fibrinogen-like domain. It is a secreted protein and shares 59% sequence identity with Angptl1. In endothelial cells, Angptl2 does not function as a growth factor, instead it functions to induce sprouting and regulate angiogenesis. This activity is thought to be exerted via the interaction of Angptl2 with an endothelial cell receptor and may involve paracrine and autocrine signalling. The loss of Angptl2 results in impaired vascular development. In addition, upregulation of Angptl2 may play a significant role in the pathogenesis of diabetic glomerulopathy and tumor growth and survival.

REFERENCES

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- 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.
- Stassar, M.J., et al. 2001. Identification of human renal cell carcinoma associated genes by suppression subtractive hybridization. *Br. J. Cancer* 85: 1372-1382.
- Ito, Y., et al. 2003. Inhibition of angiogenesis and vascular leakiness by angiopoietin-related protein 4. *Cancer Res.* 63: 6651-6657.
- Kubota, Y., et al. 2005. Cooperative interaction of angiopoietin-like proteins 1 and 2 in zebrafish vascular development. *Proc. Natl. Acad. Sci. USA* 102: 13502-13507.
- George, J. 2006. Angiopoietin-like proteins: another player in the metabolic field. *J. Hepatol.* 44: 832-834.

CHROMOSOMAL LOCATION

Genetic locus: ANGPTL2 (human) mapping to 9q33.3; Angptl2 (mouse) mapping to 2 B.

SOURCE

Angptl2 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Angptl2 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-107143 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Angptl2 (P-13) is recommended for detection of Angptl2 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 Angptl family members.

Angptl2 (P-13) is also recommended for detection of Angptl2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Angptl2 siRNA (h): sc-72351, Angptl2 siRNA (m): sc-72352, Angptl2 shRNA Plasmid (h): sc-72351-SH, Angptl2 shRNA Plasmid (m): sc-72352-SH, Angptl2 shRNA (h) Lentiviral Particles: sc-72351-V and Angptl2 shRNA (m) Lentiviral Particles: sc-72352-V.

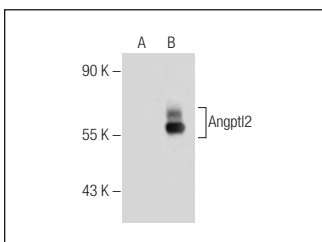
Molecular Weight of Angptl2: 57 kDa.

Positive Controls: Angptl2 (h): 293T Lysate: sc-158269.

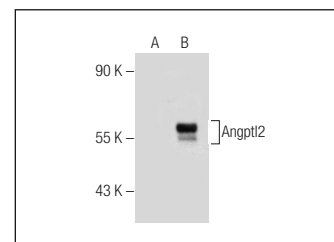
RECOMMENDED SECONDARY REAGENTS

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



Angptl2 (P-13): sc-107143. Western blot analysis of Angptl2 expression in non-transfected: sc-117752 (A) and human Angptl2 transfected: sc-158269 (B) 293T whole cell lysates.



Angptl2 (P-13): sc-107143. Western blot analysis of Angptl2 expression in non-transfected: sc-117752 (A) and human Angptl2 transfected: sc-371477 (B) 293T whole cell lysates.

RESEARCH USE

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

MONOS
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Try **Angptl2 (H-2): sc-393747** or **Angptl2 (97864): sc-73711**, our highly recommended monoclonal alternatives to Angptl2 (P-13).