## SANTA CRUZ BIOTECHNOLOGY, INC.

# Angptl2 (97864): sc-73711



## 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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- Stassar, M.J., et al. 2001. Identification of human renal cell carcinoma associated genes by suppression subtractive hybridization. Br. J. Cancer 85: 1372-1382.
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- 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.
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- Sun, H., et al. 2007. Enhanced expression of Angptl2 in the microvascular lesions of diabetic glomerulopathy. Nephron Exp. Nephrol. 105: e117-e123.
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### CHROMOSOMAL LOCATION

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

## SOURCE

Angptl2 (97864) is a rat monoclonal antibody raised against amino acids 23-493 of Angptl2 of mouse origin.

## PRODUCT

Each vial contains 100  $\mu g$   $lgG_{2a}$  in 1.0 ml PBS with < 0.1% sodium azide and protein stabilizer.

## **APPLICATIONS**

Angptl2 (97864) 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).

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.

## SELECT PRODUCT CITATIONS

1. Zheng, J.Y., et al. 2011. Tumor necrosis factor- $\alpha$  increases angiopoietinlike protein 2 gene expression by activating Foxo1 in 3T3-L1 adipocytes. Mol. Cell. Endocrinol. 339: 120-129.

## **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.