

Anti-ANGPTL3 Antibody (Fibrogen-like domain) Rabbit Anti Human Polyclonal Antibody Catalog # ALS18503

## Specification

# Anti-ANGPTL3 Antibody (Fibrogen-like domain) - Product Information

Application Primary Accession Predicted Host Clonality Calculated MW

WB, IHC-P, E <u>09Y5C1</u> Human Rabbit Polyclonal 53637

### Anti-ANGPTL3 Antibody (Fibrogen-like domain) - Additional Information

Gene ID 27329

Alias Symbol ANGPTL3 Other Names ANGPTL3, ANGPT5, ANG-5, Angiopoietin-5, Angiopoietin-like 3, Angiopoietin-related protein 3, FHBL2, Angiopoietin 5, Angiopoietin-like protein 3

**Target/Specificity** Recognizes the fibrinogen-like domain of human ANGPTL3. Detects a band of ~36kDa by Western blot.

Reconstitution & Storage Protein A purified

**Precautions** Anti-ANGPTL3 Antibody (Fibrogen-like domain) is for research use only and not for use in diagnostic or therapeutic procedures.

### Anti-ANGPTL3 Antibody (Fibrogen-like domain) - Protein Information

Name ANGPTL3

#### Synonyms ANGPT5

Function

Acts in part as a hepatokine that is involved in regulation of lipid and glucose metabolism (PubMed:<a href="http://www.uniprot.org/citations/11788823" target="\_blank">11788823</a>, PubMed:<a href="http://www.uniprot.org/citations/12909640" target="\_blank">12909640</a>, PubMed:<a href="http://www.uniprot.org/citations/23661675" target="\_blank">23661675</a>, PubMed:<a href="http://www.uniprot.org/citations/25495645" target="\_blank">25495645</a>). Proposed to play a role in the trafficking of energy substrates to either storage or oxidative tissues in response to food intake (By similarity). Has a stimulatory effect on plasma triglycerides (TG), which is achieved by suppressing plasma TG clearance via inhibition of LPL activity. The inhibition



of LPL activity appears to be an indirect mechanism involving recruitment of proprotein convertases PCSK6 and FURIN to LPL leading to cleavage and dissociation of LPL from the cell surface; the function does not require ANGPTL3 proteolytic cleavage but seems to be mediated by the N- terminal domain, and is not inhibited by GPIHBP1 (PubMed:<a

href="http://www.uniprot.org/citations/12097324" target="\_blank">12097324</a>, PubMed:<a href="http://www.uniprot.org/citations/19318355" target="\_blank">19318355</a>, PubMed:<a href="http://www.uniprot.org/citations/20581395" target="\_blank">20581395</a>). Can inhibit endothelial lipase, causing increased plasma levels of high density lipoprotein (HDL) cholesterol and phospholipids (PubMed:<a href="http://www.uniprot.org/citations/17110602" target="\_blank">17110602</a>, PubMed:<a href="http://www.uniprot.org/citations/19028676" target="\_blank">19028676</a>). Can bind to adipocytes to activate lipolysis, releasing free fatty acids and glycerol (PubMed:<a href="http://www.uniprot.org/citations/12565906" target="\_blank">12565906</a>). Suppresses LPL specifically in oxidative tissues which is required to route very low density lipoprotein (VLDL)-TG to white adipose tissue (WAT) for storage in response to food; the function may involve cooperation with circulating, liver-derived ANGPTL8 and ANGPTL4 expression in WAT (By similarity). Contributes to lower plasma levels of low density lipoprotein (LDL)-cholesterol by a mechanism that is independent of the canonical pathway implicating APOE and LDLR. May stimulate hypothalamic LPL activity (By similarity).

#### **Cellular Location**

Secreted {ECO:0000250, ECO:0000305|PubMed:11877390}. Cell projection, lamellipodium {ECO:0000250|UniProtKB:Q9R182}. Note=Colocalized with HSPG2 and activated ITGB3 on podocytes. {ECO:0000250|UniProtKB:Q9R182}

### **Tissue Location**

Expressed principally in liver. Weakly expressed in kidney. Binds to adipocytes. Increased expression and colocalization with activated ITGB3 in glomeruli of patients with nephrotic syndrome showing effaced podocyte foot processes (at protein level)

# Anti-ANGPTL3 Antibody (Fibrogen-like domain) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ANGPTL3 Antibody (Fibrogen-like domain) - Images