

ANGPTL3 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF2822a

Specification

ANGPTL3 Antibody (internal region) - Product Information

Application Primary Accession Other Accession Predicted Host Clonality Concentration Isotype Calculated MW

E <u>O9Y5C1</u> <u>NP_055310.1</u>, <u>27329</u> Human Goat Polyclonal 0.5 mg/ml IgG 53637

ANGPTL3 Antibody (internal region) - Additional Information

Gene ID 27329

Other Names

Angiopoietin-related protein 3, Angiopoietin-5, ANG-5, Angiopoietin-like protein 3, ANGPTL3, ANGPT5

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions ANGPTL3 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

ANGPTL3 Antibody (internal region) - Protein Information

Name ANGPTL3

Synonyms ANGPT5

Function

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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">23661675</a>, PubMed:<a href="http://www.uniprot.org/citations/25495645" target="_blank">25495645</a>).
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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:12097324, PubMed:19318355, PubMed:20581395). Can inhibit endothelial lipase, causing increased plasma levels of high density lipoprotein (HDL) cholesterol and phospholipids (PubMed:17110602, PubMed:19028676). Can bind to adipocytes to activate lipolysis, releasing free fatty acids and glycerol (PubMed: 12565906). 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)

ANGPTL3 Antibody (internal region) - 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>

ANGPTL3 Antibody (internal region) - Images

ANGPTL3 Antibody (internal region) - References

Hepatic proprotein convertases modulate HDL metabolism. Jin W, Wang X, Millar JS, Quertermous T, Rothblat GH, Glick JM, Rader DJ. Cell Metab. 2007 Aug;6(2):129-36. PMID: 17681148