

# ANGPTL3 Antibody

Rabbit mAb

Catalog # AP92490

## Product Information

<b>Application</b>	WB, IF, ICC
<b>Primary Accession</b>	<a href="#">Q9Y5C1</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	ANG5; Angiopoietin 5; Angiopoietin like 3; ANGPT5; ANGPTL3; ANL3; FHBL2;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	53637

## Additional Information

<b>Dilution</b>	WB 1:500~1:2000 ICC/IF 1:50~1:200
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human ANGPTL3
<b>Description</b>	Acts in part as a hepatokine that is involved in regulation of lipid and glucose metabolism. 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.
<b>Storage Condition and Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## Protein Information

<b>Name</b>	ANGPTL3
<b>Synonyms</b>	ANGPT5
<b>Function</b>	Acts in part as a hepatokine that is involved in regulation of lipid and glucose metabolism (PubMed: <a href="#">11788823</a> , PubMed: <a href="#">12909640</a> , PubMed: <a href="#">23661675</a> , PubMed: <a href="#">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="#">12097324</a> , PubMed: <a href="#">19318355</a> , PubMed: <a href="#">20581395</a> ). 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

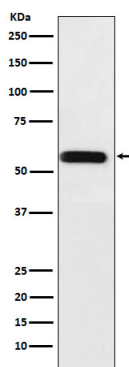
Secreted {ECO:0000250, ECO:0000305 | PubMed:11877390}. Cell projection, lamellipodium {ECO:0000250 | UniProtKB:Q9R182}. Note=Colocalized with HSPG2 and activated ITGB3 on podocytes. {ECO:0000250 | UniProtKB:Q9R182}

#### 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)

## Images

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Western blot analysis of ANGPTL3 expression in A375 cell lysate.

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