

Anti-ANGPTL3 Antibody
Catalog # ABO11381**Specification**

Anti-ANGPTL3 Antibody - Product Information

Application	WB
Primary Accession	Q9Y5C1
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Angiopoietin-related protein 3(ANGPTL3) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ANGPTL3 Antibody - Additional Information

Gene ID 27329

Other Names

Angiopoietin-related protein 3, Angiopoietin-5, ANG-5, Angiopoietin-like protein 3, ANGPTL3(17-221), ANGPTL3(17-224), ANGPTL3, ANGPT5

Calculated MW

53637 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Secreted .

Tissue Specificity

Expressed principally in liver. Weakly expressed in kidney. .

Protein Name

Angiopoietin-related protein 3

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human ANGPTL3(32-48aa EPKSRFAMLDDVKILAN), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Contains 1 fibrinogen C-terminal domain.

Anti-ANGPTL3 Antibody - Protein Information

Name ANGPTL3

Synonyms ANGPT5

Function

Acts in part as a hepatokine that is involved in regulation of lipid and glucose metabolism (PubMed:11788823, PubMed:12909640, PubMed:23661675, PubMed:25495645). 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

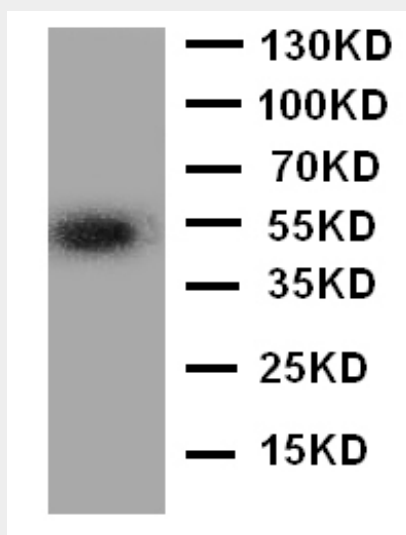
syndrome showing effaced podocyte foot processes (at protein level)

Anti-ANGPTL3 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-ANGPTL3 Antibody - Images



Anti-ANGPTL3 antibody, ABO11381, Western blottingWB: A549 Cell Lysate

Anti-ANGPTL3 Antibody - Background

ANGPTL3(Angiopoietin-Like 3), also known as ANGPT5, is a protein which in humans is encoded by the ANGPTL3 gene. The protein encoded by this gene is a member of the angiopoietin-like family of secreted factors. By radiation hybrid mapping and the use of surrounding genes, Conklin et al.(1999) mapped the ANGPTL3 gene to chromosome 1p31. It is predominantly expressed in the liver, and has the characteristic structure of angiopoietins, consisting of a signal peptide, N-terminal coiled-coil domain and the C-terminal fibrinogen(FBN)-like domain. Angptl3 also acts as dual inhibitor of lipoprotein lipase(LPL) and endothelial lipase(EL), and increases plasma triglyceride and HDL cholesterol in rodents. ANGPTL3 inhibit endothelial lipase to catalyze HDL-phospholipid and increase HDL-PL levels.