

Anti-ANGPTL3 Antibody (Coiled-coil domain)

Rabbit Anti Human Polyclonal Antibody Catalog # ALS18502

Specification

Anti-ANGPTL3 Antibody (Coiled-coil domain) - Product Information

Application WB, IHC-P, E
Primary Accession
Predicted Human
Host Rabbit
Clonality Polyclonal
Calculated MW 53637

Anti-ANGPTL3 Antibody (Coiled-coil 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 coiled-coil domain of human ANGPTL3. Detects a band of ~29kDa by Western blot. Weakly cross-reacts with human full length ANGPTL3.

Reconstitution & Storage

Protein A purified

Precautions

Anti-ANGPTL3 Antibody (Coiled-coil domain) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-ANGPTL3 Antibody (Coiled-coil 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: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 (Coiled-coil domain) - Protocols

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

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

Anti-ANGPTL3 Antibody (Coiled-coil domain) - Images