

Anti-ANGPTL3 Antibody (Coiled-coil domain)

Rabbit Anti Human Polyclonal Antibody

Catalog # ALS18502

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9Y5C1
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53637
Concentration (mg/ml)	1 mg/ml

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.

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)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.