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Anti-ANGPTL3 Antibody

Rabbit polyclonal antibody to ANGPTL3
Catalog # AP60140

Product Information

Application	WB
Primary Accession	Q9Y5C1
Other Accession	Q9R182
Reactivity	Human, Mouse, Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53637

Additional Information

Gene ID	27329
Other Names	ANGPT5; Angiopoietin-related protein 3; Angiopoietin-5; ANG-5; Angiopoietin-like protein 3
Target/Specificity	Recognizes endogenous levels of ANGPTL3 protein.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

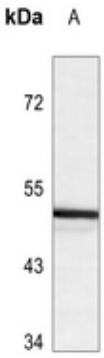
Name	ANGPTL3
Synonyms	ANGPT5
Function	Acts in part as a hepatokine that is involved in regulation of lipid and glucose metabolism (PubMed:11788823, PubMed:12909640, PubMed:23661675, PubMed:25495645). Proposed to play a role in the trafficking of energy substrates to either storage or oxidative tissues 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)

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ANGPTL3. The exact sequence is proprietary.

Images



Western blot analysis of ANGPTL3 expression in Hela (A) whole cell lysates.