

Anti-ANGPTL4 Picoband Antibody

Catalog # ABO10157

Product Information

Application	WB, E
Primary Accession	Q9BY76
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Angiopoietin-related protein 4(ANGPTL4) detection. Tested with WB, ELISA in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	51129
Other Names	Angiopoietin-related protein 4, Angiopoietin-like protein 4, Hepatic fibrinogen/angiopoietin-related protein, HFARP, ANGPTL4, ARP4, HFARP, PGAR
Calculated MW	45214
Application Details	ELISA , 0.1-0.5 μ g/ml, Human, - Western blot, 0.1-0.5 μ g/ml, Human
Subcellular Localization	Secreted . Secreted, extracellular space, extracellular matrix . The unprocessed form interacts with the extracellular matrix. This may constitute a dynamic reservoir, a regulatory mechanism of the bioavailability of ANGPTL4 (By similarity). .
Tissue Specificity	Expressed at high levels in the placenta, heart, liver, muscle, pancreas and lung but expressed poorly in the brain and kidney. .
Source	Eukaryota
Protein Name	Angiopoietin-related protein 4
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human ANGPTL4 (369-406aa QQRQKLKKGIFWKTWRGRYYPLQATTMLIQPMAAEAAAS), different from the related mouse and rat sequences by seven amino acids.
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.

Protein Information

Name	ANGPTL4
Synonyms	ARP4, HFARP, PGAR {ECO:0000303 PubMed:10
Function	Mediates inactivation of the lipoprotein lipase LPL, and thereby plays a role in the regulation of triglyceride clearance from the blood serum and in lipid metabolism (PubMed: 19270337 , PubMed: 21398697 , PubMed: 27929370 , PubMed: 29899144). May also play a role in regulating glucose homeostasis and insulin sensitivity (Probable). Inhibits proliferation, migration, and tubule formation of endothelial cells and reduces vascular leakage (PubMed: 14583458 , PubMed: 17068295). Upon heterologous expression, inhibits the adhesion of endothelial cell to the extracellular matrix (ECM), and inhibits the reorganization of the actin cytoskeleton, formation of actin stress fibers and focal adhesions in endothelial cells that have adhered to ANGPTL4-containing ECM (in vitro) (PubMed: 17068295). Depending on context, may modulate tumor-related angiogenesis (By similarity).
Cellular Location	Secreted. Secreted, extracellular space, extracellular matrix. Note=The unprocessed form interacts with the extracellular matrix (PubMed: 17068295 , PubMed: 21398697). This may constitute a dynamic reservoir, a regulatory mechanism of the bioavailability of ANGPTL4 (Probable).
Tissue Location	Detected in blood plasma (at protein level) (PubMed: 29899519). Detected in liver (PubMed: 10698685). Detected in white fat tissue and placenta (PubMed: 10866690). Expressed at high levels in the placenta, heart, liver, muscle, pancreas and lung but expressed poorly in the brain and kidney.

Background

Angiopietin-related protein 4 (Angptl4) is a protein that in humans is encoded by the ANGPTL4 gene. This gene is a member of the angiopoietin/angiopoietin-like gene family and encodes a glycosylated, secreted protein with a fibrinogen C-terminal domain. And this gene is induced under hypoxic conditions in endothelial cells and is the target of peroxisome proliferation activators. By radiation hybrid analysis, Angptl4 gene is mapped to 19p13.3. ANGPTL4 contributed to tumor growth and protected cells from anoikis, a form of programmed cell death induced when contact-dependent cells detach from the surrounding tissue matrix.

Images

Figure 1. Western blot analysis of ANGPTL4 using anti-ANGPTL4 antibody (ABO10157). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. lane 1: recombinant human ANGPTL4 protein 1ngAfter Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ANGPTL4 antigen affinity



purified polyclonal antibody (Catalog # ABO10157) at 0.5 μ g/mL overnight at 4 °C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for ANGPTL4 at approximately 55KD. The expected band size for ANGPTL4 is at 44KD.

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