

Anti-ANGPTL4 Antibody

Catalog # ABO10755

Specification

Anti-ANGPTL4 Antibody - Product Information

ApplicationWBPrimary AccessionQ9BY76HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Angiopoietin-related protein 4(ANGPTL4) detection. Tested withWB in Human;Mouse;Rat.WB

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

Predicted Rat

Anti-ANGPTL4 Antibody - 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 MW KDa

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

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.

Protein Name Angiopoietin-related protein 4

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 C-terminus of human Angiopoietin-like 4(349-367aa WWFGTCSHSNLNGQYFRSI), different from the related rat and mouse sequences by one amino acid.

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-ANGPTL4 Antibody - 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:27929370, 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:14583458, PubMed:17068295, Dupon 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.

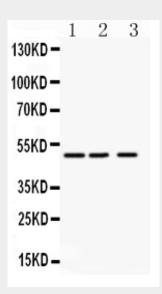


Anti-ANGPTL4 Antibody - Protocols

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

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

Anti-ANGPTL4 Antibody - Images



Anti- ANGPTL4 antibody, ABO10755, Western blottingAll lanes: Anti ANGPTL4 (ABO10755) at 0.5ug/mlLane 1: Human Placenta Tissue Lysate at 50ugLane 2: SMMC Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugPredicted bind size: 50KDObserved bind size: 50KD

Anti-ANGPTL4 Antibody - Background

Angiopoietin-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. 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.