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ANGPTL4 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP9207c

Specification

ANGPTL4 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q9BY76

ANGPTL4 Antibody (Center) Blocking Peptide - 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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP9207c was selected from the Center region of human ANGPTL4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ANGPTL4 Antibody (Center) Blocking Peptide - 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.

ANGPTL4 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

ANGPTL4 Antibody (Center) Blocking Peptide - Images

ANGPTL4 Antibody (Center) Blocking Peptide - Background

ANGPTL4 is a member of the angiopoietin/angiopoietin-like gene family and encodes a glycosylated, secreted protein with a fibrinogen C-terminal domain. This protein is induced under hypoxic conditions in endothelial cells and is the target of peroxisome proliferation activators. The encoded protein is a serum hormone directly involved in regulating glucose homeostasis, lipid metabolism, and insulin sensitivity and also acts as an apoptosis survival factor for vascular endothelial cells. The encoded protein may play a role in several cancers and it also has been shown to prevent the metastatic process by inhibiting vascular activity as well as tumor cell motility and invasiveness. Decreased expression of this protein has been associated with type 2 diabetes.

ANGPTL4 Antibody (Center) Blocking Peptide - References

Maxwell,T.J., et.al., Int J Mol Sci 11 (1), 370-385 (2010)Legry,V., et.al, J. Clin. Endocrinol. Metab. 94 (12), 5070-5077 (2009)Sonnenburg,W.K., et.al, J. Lipid Res. 50 (12), 2421-2429 (2009)