

Product datasheet

Recombinant human Angiopoietin-like 4 protein ab108558

1 Image

Overview

Product name	Recombinant human Angiopoietin-like 4 protein
Protein length	Protein fragment

Description

Nature	Recombinant
Source	HEK 293 cells
Amino Acid Sequence	
Accession	Q9BY76
Species	Human
Molecular weight	18 kDa including tags
Amino acids	1 to 161
Tags	DDDDK tag C-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab108558** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Biological activity	Activates ERK phosphorylation in THP-1 cells.
Applications	SDS-PAGE Functional Studies
Endotoxin level	< 0.100 Eu/µg
Purity	> 90 % SDS-PAGE. ab108558 is 0.2 µm filtered.
Form	Liquid
Additional notes	Working aliquots are stable for up to 3 months when stored at -20°C.

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Preservative: None

Constituents: PBS

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function

Protein with hypoxia-induced expression in endothelial cells. May act as a regulator of angiogenesis and modulate tumorigenesis. Inhibits proliferation, migration, and tubule formation of endothelial cells and reduces vascular leakage. May exert a protective function on endothelial cells through an endocrine action. It is directly involved in regulating glucose homeostasis, lipid metabolism, and insulin sensitivity. In response to hypoxia, the unprocessed form of the protein accumulates in the subendothelial extracellular matrix (ECM). The matrix-associated and immobilized unprocessed form limits the formation of actin stress fibers and focal contacts in the adhering endothelial cells and inhibits their adhesion. It also decreases motility of endothelial cells and inhibits the sprouting and tube formation.

Tissue specificity

Expressed at high levels in the placenta, heart, liver, muscle, pancreas and lung but expressed poorly in the brain and kidney.

Sequence similarities

Contains 1 fibrinogen C-terminal domain.

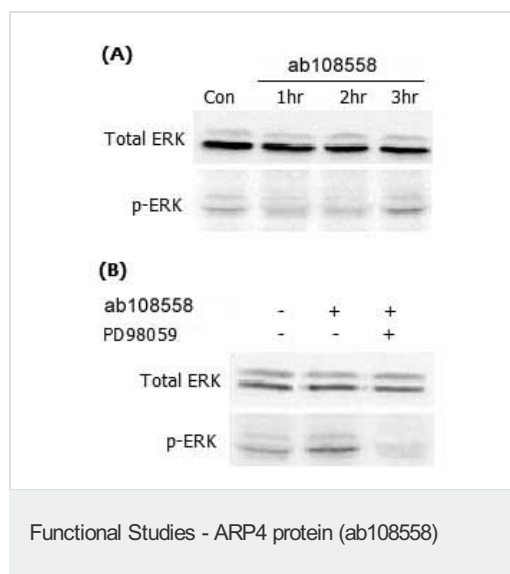
Post-translational modifications

N-glycosylated.

Cellular 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.

Images



ERK phosphorylation induced by ab108558 (hANGPTL4 - coiled-coil domain) in THP-1 cells.

A. THP-1 monocyte cells were serum starved for 16 hr and then stimulated with ab108558 (500 ng/ml) for 1, 2 and 3 hrs, respectively.

Antibodies against pERK1/2 and total ERK1/2 were used for immunoblotting.

B. Cells were treated with 20 μ M PD98058 (MEK inhibitor) for 30 min prior adding of 500 ng/ml ab108558. After 3 hrs of incubation, Western blot was performed.

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