Datasheet for ABIN7539300

AGGF1 Protein (His tag)

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Overview

Quantity:	5 µg
Target:	AGGF1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This AGGF1 protein is labelled with His tag.

Product Details

Purpose:	AGGF1 (fragment)

Target Details

Target:	AGGF1
Alternative Name:	AGGF1 (AGGF1 Products)
Background:	Angiogenic factor VG5Q, hVG5Q, G patch domain-containing protein 7, Vasculogenesis gene on 5q protein,AGGF1, also known as VG5Q, was identified by its association with Klippel Trenaunay syndrome (KTS), a congenital vascular morphogenesis disorder (1 3). AGGF1 is expressed by vascular endothelial cells in many tissues (1). It appears to be secreted and promotes endothelial cell proliferation following interactions with endothelial cell surfaces (1). AGGF1 also directly interacts with TWEAK (1), a TNF superfamily ligand with angiogenic properties (8). It was shown that AGGF1 is involved in establishing venous identity in zebrafish embryos. Overexpression of AGGF1 led to increased angiogenesis and increased lumen diameter of veins, whereas knockdown of AGGF1 expression resulted in defective

Target Details

	vasculogenesis and angiogenesis. Overexpression of AGGF1 increased expression of venous markers (e.g. VEGFR-3/FLT4), but had little effect on arterial markers (e.g. Notch5). Knockdown of AGGF1 expression resulted in a loss of venous identity (loss of expression of VEGFR-3/FLT4, Ephb4 and Dab2), but had no effect on the expression of arterial development. It was further shown that AGGF1 activates AKT, and that decreased AGGF1 expression inhibits AKT activation. Overexpression of constitutively active AKT rescues the loss of venous identity caused by AGGF1 downregulation. These results indicate that AGGF might be an angiogenic factor with an important role in the specification of vein identity and suggests that AGGF1-mediated AKT signaling is responsible for establishing venous cell fate.
Gene ID:	55109
UniProt:	Q8N302

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized