Elabscience®

Human VEGFR1/FLT1 Antibody Pair Set

Catalog No.	E-KAB-0116	Applications
Synonyms	FLT, FLT-1, VEGFR-1, Fms-related	d tyrosine kinase 1

ELISA

Kit components & Storage

Title	Specifications	Storage
Human VEGFR1/FLT1 Capture Antibody	1 vial, 100 µ g	Store at -20° C for one year.
		Avoid freeze / thaw cycles.
Human VEGFR1/FLT1 Detection	1 vial, 50 μL	Store at -20° C for one year.
Antibody (Biotin)		Avoid freeze / thaw cycles.

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0116)		
		Human VEGFR1/FLT1 Capture	Human VEGFR1/FLT1 Detection	
		Antibody	Antibody (Biotin)	
Immunogen	Immunogen	Recombinant Human VEGFR1/FLT1	Recombinant Human VEGFR1/FLT1	
Information		protein	protein	
	Swissprot	P17948		
Product details	Reactivity	Human	Human	
	Host	Rabbit	Rabbit	
	Conjugation	Unconjugated	Biotin	
	Concentration	0.5mg/mL	/	
	Buffer	PBS with 0.04% Proclin 300, 50%	PBS with 0.04% Proclin 300, 1%	
		glycerol, pH 7.4	protective protein, 50% glycerol, pH	
			7.4	
	Purify	Protein A & Antigen Affinity	Protein A & Antigen Affinity	
	Specificity	Detects Human VEGFR1/FLT1 in ELISAs.		

For Research Use Only

Elabscience®

Applications

Human VEGFR1/FLT1 Sandwich ELISA Assay:

	Recommended	Reagent	Images	
	Concentration/Dilution			
ELISA	0.5-4µg/mL	Human VEGFR1/FLT1 Capture		
Capture		Antibody		
ELISA Detection	1:1000-1:10000	Human VEGFR1/FLT1 Detection Antibody (Biotin)	Optical Density	
			0.01 10 Human VEGFR1/FLT1 concentration(pg/mL)	

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFA, VEGFB and PGF, and plays an essential role in the development of embryonic vasculature, the regulation of angiogenesis, cell survival, cell migration, macrophage function, chemotaxis, and cancer cell invasion. Acts as a positive regulator of postnatal retinal hyaloid vessel regression. May play an essential role as a negative regulator of embryonic angiogenesis by inhibiting excessive proliferation of endothelial cells. Can promote endothelial cell proliferation, survival and angiogenesis in adulthood. Its function in promoting cell proliferation seems to be cell-type specific. Promotes PGF-mediated proliferation of endothelial cells, proliferation of some types of cancer cells, but does not promote proliferation of normal fibroblasts (in vitro). Has very high affinity for VEGFA and relatively low protein kinase activity, may function as a negative regulator of VEGFA signaling by limiting the amount of free VEGFA and preventing its binding to KDR. Modulates KDR signaling by forming heterodimers with KDR. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate and the activation of protein kinase C. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3kinase, leading to activation of phosphatidylinositol kinase and the downstream signaling pathway. Mediates activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Phosphorylates SRC and YES1, and may also phosphorylate CBL. Promotes phosphorylation of AKT1 at 'Ser-473'. Promotes phosphorylation of PTK2/FAK1.

For Research Use Only

Toll-free: 1-888-852-8623 Web: <u>www.elabscience.com</u>