

Datasheet for ABIN5510576

FLT1 ELISA Kit**1** Image[Go to Product page](#)

Overview

Quantity:	96 tests
Target:	FLT1
Binding Specificity:	AA 23-759
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse FLT1/VEGFR1
Brand:	PicoKine™
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	Expression system for standard: NSO, Immunogen sequence: Y23-E759
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Target Details

Target:	FLT1
Alternative Name:	FIt1 (FLT1 Products)
Background:	Protein Function: 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. 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, and proliferation of some types of cancer cells, but does not promote proliferation of normal fibroblasts. 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 3-kinase, leading to the 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, YES1 and PLCG, and may also phosphorylate CBL. Promotes phosphorylation of AKT1 and PTK2/FAK1 (By similarity).

Background: Vascular endothelial growth factor receptor 1 is a protein that in humans is encoded by the FLT1 gene. Oncogene FLT belongs to the src gene family and is related to oncogene ROS. Like other members of this family, it shows tyrosine protein kinase activity that is important for the control of cell proliferation and differentiation. This protein binds to VEGFR-A, VEGFR-B and placental growth factor and plays an important role in angiogenesis and vasculogenesis. Expression of this receptor is found in vascular endothelial cells, placental trophoblast cells and peripheral blood monocytes. Multiple transcript variants encoding different isoforms have been found for this gene. Isoforms include a full-length transmembrane receptor isoform and shortened, soluble isoforms. The soluble isoforms are associated with the onset of pre-eclampsia.

Synonyms: Vascular endothelial growth factor receptor 1, VEGFR-1, 2, 7, 10, 1, Embryonic receptor kinase 2, Fms-like tyrosine kinase 1, FLT-1, Tyrosine-protein kinase receptor FLT, Flt1, Emrk2, Flt, Vegfr1,

Full Gene Name: Vascular endothelial growth factor receptor 1

Cellular Localisation: Cell membrane, Single-pass type I membrane protein. Endosome.

Autophosphorylation promotes ubiquitination and endocytosis..

UniProt: [P35969](#)

Pathways: [RTK Signaling](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [VEGFR1 Specific Signals](#)

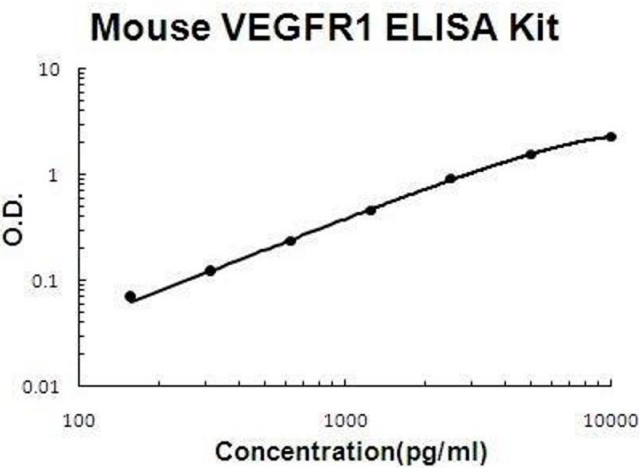
Application Details

Plate:	Pre-coated
Restrictions:	For Research Use only

Handling

Storage:	4 °C,-20 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles(Shipped with wet ice.)
Expiry Date:	12 months

Images



ELISA

Image 1. Mouse FLT1/VEGFR1 PicoKine ELISA Kit standard curve