abcam

Product datasheet

Human VEGF Receptor 2 ELISA Kit ab100665

2 References 2 Images

Overview

Product name	Human VEGF Receptor 2 ELISA Kit
Detection method	Colorimetric
Sample type	Cell culture supernatant, Serum, Plasma
Assay type	Sandwich (quantitative)
Sensitivity	< 70 pg/ml
Range	34.3 pg/ml - 25000 pg/ml
Recovery	95 %

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	96.23	86% - 104%
Serum	96.46	85% - 105%
Plasma	94.78	84% - 103%

Assay duration	Multiple steps standard assay
Species reactivity	**Reacts with:** Human
Product overview	Abcam's VEGF Receptor 2 Human ELISA (Enzyme-Linked Immunosorbent Assay) kit is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of Human VEGF Receptor 2 in serum, plasma and cell culture supernatants. (Genecards: KDR) This assay employs an antibody specific for Human VEGF Receptor 2 coated on a 96-well plate. Standards and samples are pipetted into the wells and VEGF Receptor 2 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human VEGF Receptor 2 antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of VEGF Receptor 2 bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.
Notes	Optimization may be required with urine samples.
Platform	Microplate

Properties

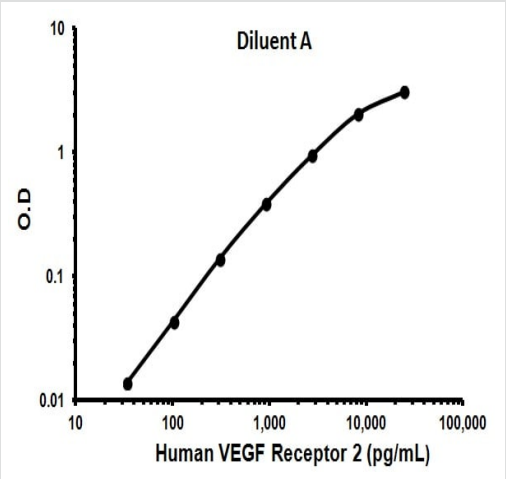
Storage instructions Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
20X Wash Buffer	1 x 25ml
5X Assay Diluent B	1 x 15ml
600X HRP-Streptavidin Concentrate	1 x 200µl
Assay Diluent A	1 x 30ml
Biotinylated anti-Human VEGF Receptor 2	2 vials
Recombinant Human VEGF Receptor 2 Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml
VEGF Receptor 2 Microplate (12 x 8 wells)	1 unit

Relevance VEGF receptor 2 is a member of a receptor tyrosine kinase family whose activation plays an essential role in a large number of biological processes such as embryonic development, wound healing, cell proliferation, migration and differentiation. Like other growth factor receptors, upon ligand binding VEGF receptor 2 dimerises and is autophosphorylated on multiple tyrosine residues. These sites can be involved in the regulation of kinase activity or serve as binding sites for SH2 and phosphotyrosine binding containing signalling proteins. Phosphorylation of Tyrosines 1054 and 1059 in the activation loop is required for activation of VEGF receptor 2 and its intrinsic tyrosine kinase activity. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.

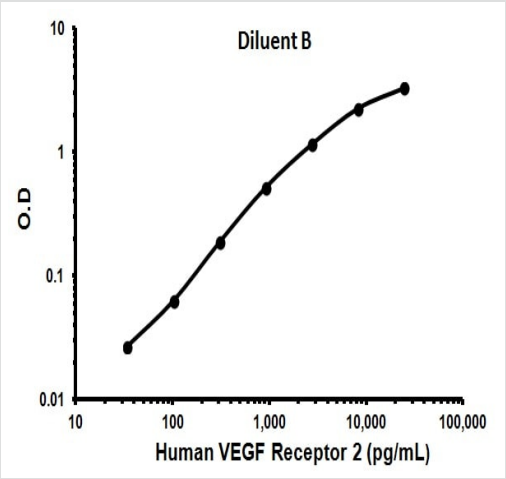
Cellular localization Cell Membrane, Cytoplasmic, Nuclear and Secreted

Images



Typical standard curve

Representative standard curve using ab100665



Typical standard curve

Representative standard curve using ab100665

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