

Human Vascular Endothelial Growth Factor 121 (VEGF121) ELISA Kit



Catalog No: #EK5874

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Package Size: #EK5874-1 48T #EK5874-2 96T

Description

Product Name	Human Vascular Endothelial Growth Factor 121 (VEGF121) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

Application Details

Detect Range:15.6-1000 pg/mL

Sensitivity:6.5 pg/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate VEGF121 in samples. An antibody specific for VEGF121 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyVEGF121 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for VEGF121 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of VEGF121 bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:VEGF165 is an angiogenic cytokine that also regulates vascular permeability.The neuropilin-1 (np1) receptor binds the 165 amino-acid form of VEGF165 and functions as an enhancer that potentiates VEGF165 signaling via the VEGFR-2 tyrosine-kinase receptor. A VEGF165 mutant (VEGF165KF) that binds to neuropilins but displays a much lower affinity toward VEGFR-1 and VEGFR-2. VEGF165KF failed to induce VEGFR-2 phosphorylation in cells lacking neuropilins. However, in the presence of np1, VEGF165KF bound weakly to VEGFR-2, induced VEGFR-2 phosphorylation, and activated ERK1/2. Interestingly, VEGF165KF did not promote formation of VEGFR-2/np1 complexes nor did high concentrations of VEGF165KF inhibit VEGF165 induced formation of such complexes, suggesting that VEGF165 does not stabilize VEGFR-2/np1 complexes by forming bridges spanning VEGFR-2 and np1.

Note: This product is for in vitro research use only