VEGF (human), ELISA kit

Ultra-sensitive ELISA kit for the quantitative detection of human VEGF with 100% cross reactivity to VEGF 165 and negligible cross-reactivity to VEGF 121 and an assay time of just 2.5 hours

The VEGF (human), EIA kit is a sensitive colorimetric immunometric enzyme immunoassay kit with results in just 2.5 hours. Absorbance is read at 450 nm. The wide dynamic range is ideal for various matrices. Assay up to 39 samples in duplicate with each kit.

Vascular Endothelial Growth Factor (VEGF), originally known as vascular permeability factor (VPF), is a family of proteins that stimulate vasculogenesis and angiogenesis. The VEGF family comprises five members: VEGF-A, VEGF-B, VEGF-C, VEGF-D and PGF (placenta growth factor). Being the first VEGF family member discovered, VEGF-A is often simply referred to as VEGF. Alternative splicing of an 8-exon VEGF mRNA results in multiple isoforms of 121, 145, 165, 183, 189, and 206 amino acids. VEGF165 and VEGF121 are predominant isoforms expressed in most cells and tissues. VEGF165 is a 45 KDa homodimeric glycoprotein and has moderate affinity to heparin. In contrast, VEGF 121 doesn't bind heparin. VEGF specifically binds tyrosine kinase receptors VEGFR-1 (Flt-1) and VEGFR-2 (Flk-1) to activate downstream signaling pathways leading to endothelial cell survival, proliferation, migration, and vascular permeability. VEGF plays an essential role in normal vascular embryonic and reproductive angiogenesis. On the other hand, VEGF is central to pathological angiogenesis by enhancing vessel permeability or recruiting endothelial progenitor cells to distant sites of neovascularization. The well understanding of VEGF in promoting pathological angiogenesis and tumor metastasis has led to the rational studies on blocking the VEGF/VEGFR axis in inhibiting angiogenesis and tumor growth in multiple clinical models.

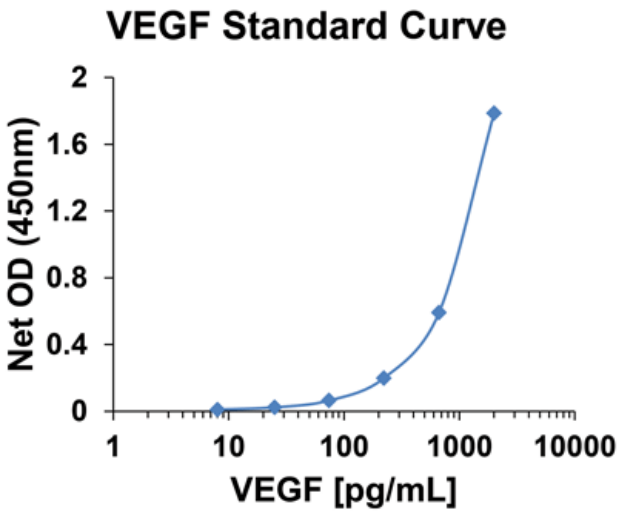
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Ordering Information Order Online »

ENZ-KIT156-0001	96 wells

Manuals, SDS & CofA View Online »

- Sensitive Assay - detect VEGF as low as 4.712 pg/ml
- Specific - 100% cross-reactivity to VEGF 165 with negligible cross-reactivity to related molecules including VEGF 121
- Flexible - wide dynamic range ideal for various matrices
- Higher throughput - assay up to 38 samples in duplicate with each kit with an assay time of just 2.5 hours
- Efficiency - our color coded reagents help to reduce errors and increase efficiency


VEGF Standard Curve
Net OD (450nm)
2
1.6
1.2
0.8
0.4
0
1
10
100
1000
10000
VEGF [pg/mL]

Handling & Storage

Long Term Storage +4°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name	Vascular endothelial growth factor
Application	Colorimetric detection, ELISA
Application Notes	For the quantitative determination of human VEGF in serum, plasma, and culture supernatants.
Assay Time	2.5 hours
Compatibility	This product is compatible with the **Absorbance 96 Plate Reader**.
Contents	Microtiter Plate, Conjugate, Detector Antibody, Assay buffer, Antibody Diluent, Wash Buffer Concentrate, Standard, TMB Substrate, Stop Solution
Crossreactivity	100% cross-reactivity to human VEGF 165. No cross-reactivity to VEGF121, PDGF-AA, IL-10, GRO, Endothelin-1, big Endothelin-1, G-CSF, SCF, IL-8, HGF, Endothelin-3.
Sensitivity	4.712 pg/ml (range 8-2,000 pg/ml)
Species Reactivity	Human
Technical Info / Product Notes	**Cited samples:** Cytokine ELISAs Cited Samples
UniProt ID	P15692-4
Wavelength	450 nm

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ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

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