Quanterix™
The Science of Precision Health

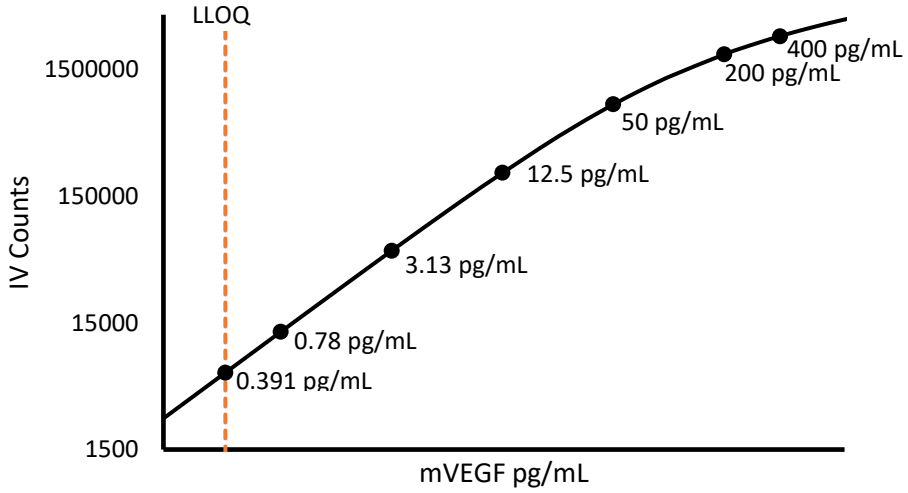
Simoa® Mouse VEGF Developer Kit
Data Sheet

Item 100-0325

Description – Mouse VEGF

Vascular endothelial growth factor (VEGF) is a 27KDa signaling protein produced by cells that stimulates vasculogenesis and angiogenesis. The VEGF family includes VEGF-A (VEGF), VEGF-B, PlGF, VEGF-C and VEGF-D. VEGF is a heparin binding protein and exists as a disulfide linked homo-dimer. It has at least 6 isoforms produced by alternative splicing. VEGF induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis, and induces permeabilization of blood vessels. Though VEGF acts primarily on endothelial cells, it also binds to receptors on HSCs, monocytes, osteoblasts and neuronal cells. VEGF is also involved in vasodilation through induction of endothelial nitric oxide synthase and the subsequent increase in nitric oxide production. When VEGF is over-expressed, it can contribute to disease; cancers that can express VEGF are able to grow and metastasize.

Calibration Curve: Calibrator concentrations and Lower Limit of Quantification are depicted in the figure below. This standard curve is for demonstration purposes; end users should prepare a standard curve for each assay run.



Minimum Required Dilution (MRD)

Diluted Sample volume (1:2 Dilution)*	50 µL per measurement

***See Kit Instructions for details**

Assay Range: The upper end of the dynamic range is equal to the top calibrator concentration multiplied by MRD.

Analytical LLOQ	**0.391 pg/mL**
Functional LLOQ (x MRD)	**0.782 pg/mL**
LOD	**51.7 fg/mL**
Assay Range	**0 – 800 pg/mL**

Endogenous Serum and Plasma Readings: Healthy EDTA plasma and serum samples (n=8) from non-medicated, non-immunized mice were measured.

% Above LOD	**100%**
% Above LLOQ	**100%**

Note: Data described were developed during assay development. Under different assay conditions, assay may perform differently than shown. For complex matrices such as serum or plasma, assay diluent optimization (for example by adding blocking agents) may improve performance of these matrices in this assay.

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