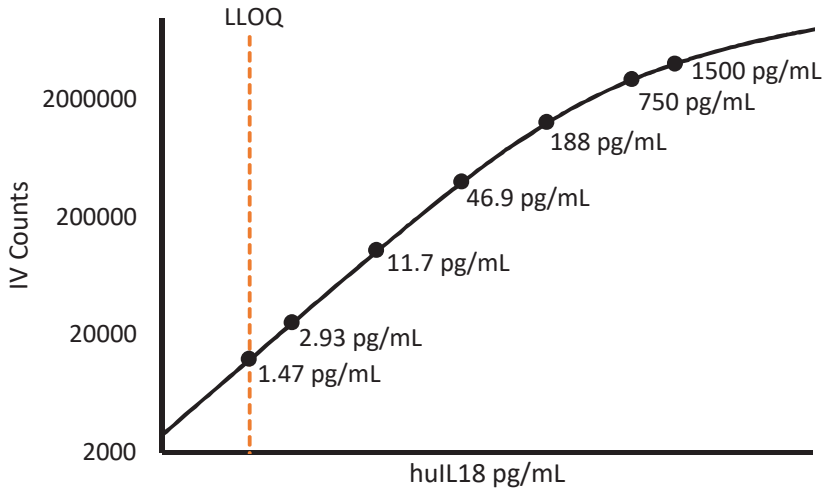
Quanterix™
The Science of Precision Health

Simoa® IL-18 Developer Kit
Data Sheet

Item 100-0425

Description – Interleukin-18 (IL-18)
Interleukin 18 (IL-18) is a 193 amino acid glycoprotein with a mass of 22.3 kDa. IL-18 is part of the IL-1 family; it has structural similarity to IL-1beta and is activated from a pro-form by intracellular IL-1beta converting enzyme (ICE). IL-18 receptor (IL-18R) is part of the toll-like receptor family, and IL-18 activity can be neutralized by IL-18-binding protein (IL-18bp). IL-18 plays a major role in Th1-mediated immune response in collaboration with IL-12. Endogenous functions of IL-18 include stimulation of IFN-γ production, increase in cytotoxicity of natural killer cells, stimulation of T helper cell differentiation and NF-kB release. IL-18 plays a major role in stimulating natural killer cell function during viral and bacterial infections. IL-18 is up-regulated and thought to play a major inflammatory role in gastrointestinal cancers.

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**

Endogenous Serum and Plasma Readings: Healthy EDTA plasma/serum (n=8) samples were measured.

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

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

Analytical LLOQ	**1.47 pg/mL**
Functional LLOQ (x MRD)	**2.94 pg/mL**
LOD	**37.2 fg/mL**
Assay Range	**0 - 3000 pg/mL**

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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