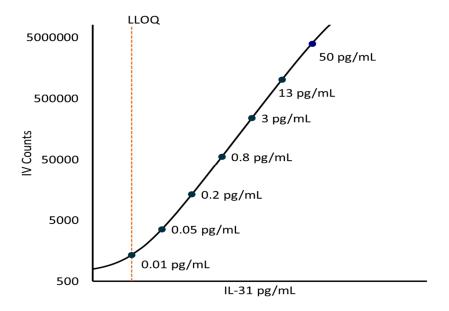
Simoa® IL-31 Developer Kit **Data Sheet** Item 100-0509

Description – IL-31

Interleukin 31 (IL-31) is 141 amino acid cytokine (molecular weight 15.8 kDa). It is produced primarily by CD4+ TH2 cells and serves to promote an inflammatory response and is involved in triggering the cellular in response to various pathogens. IL-31 binds to a heterodimeric receptor comprised of IL-31RA (IL-13 Receptor A) and OSMR (Oncostatin M Receptor) expressed on T cells, dendritic cells, and macrophages. It has been clinically shown that IL-31 plays a key role in the chronic inflammatory disease atopic dermatitis.

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	12.5 μL
(1:4 Dilution)*	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	0.0122 pg/mL
Functional LLOQ (x MRD)	0.0488 pg/mL
LOD	0.0010 pg/mL
Assay Range	0 - 200 pg/mL

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

% Above LOD	88%
% Above LLOQ	44%

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.

DS-0525 01 Page 1 of 1 DOC TEMPLATE-0117 02