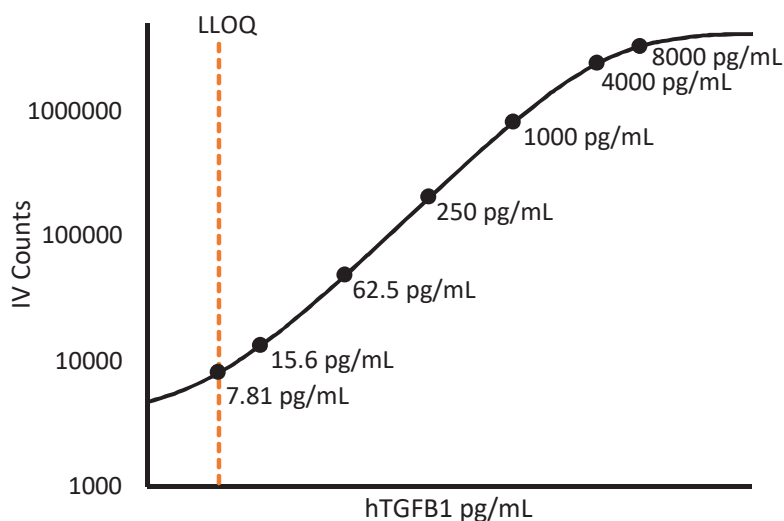


### Description – Transforming Growth Factor beta 1 (TGFβ1)

Recombinant Human TGFβ1 is a 25.0 kDa protein composed of two identical 112 amino acid polypeptide chains linked by a single disulfide bond. Human TGFβ exists as three isoforms (1,2,3), that are 70-80% homologous; the Simoa Human TGFβ assay recognizes all 3 isoforms. As part of a Kinase complex, TGFβ initiates a signal cascade that upregulates target gene expression. Target genes activated by this cascade impact a wide range of functions including cell invasion, environmental modification, differentiation, proliferation, and immune cell activation. Modification of the normal TGFβ pathway is associated with cancer development.

**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)

|                                               |                       |
|-----------------------------------------------|-----------------------|
| <b>Diluted Sample volume (1:50 Dilution)*</b> | 50 μL per measurement |
|-----------------------------------------------|-----------------------|

\*See Kit Instructions for details

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

|                     |             |
|---------------------|-------------|
| <b>% Above LOD</b>  | <b>100%</b> |
| <b>% Above LLOQ</b> | <b>100%</b> |

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

|                                |                      |
|--------------------------------|----------------------|
| <b>Analytical LLOQ</b>         | <b>7.81 pg/mL</b>    |
| <b>Functional LLOQ (x MRD)</b> | <b>391 pg/mL</b>     |
| <b>LOD</b>                     | <b>0.964 pg/mL</b>   |
| <b>Assay Range</b>             | <b>0 – 400 ng/mL</b> |

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.