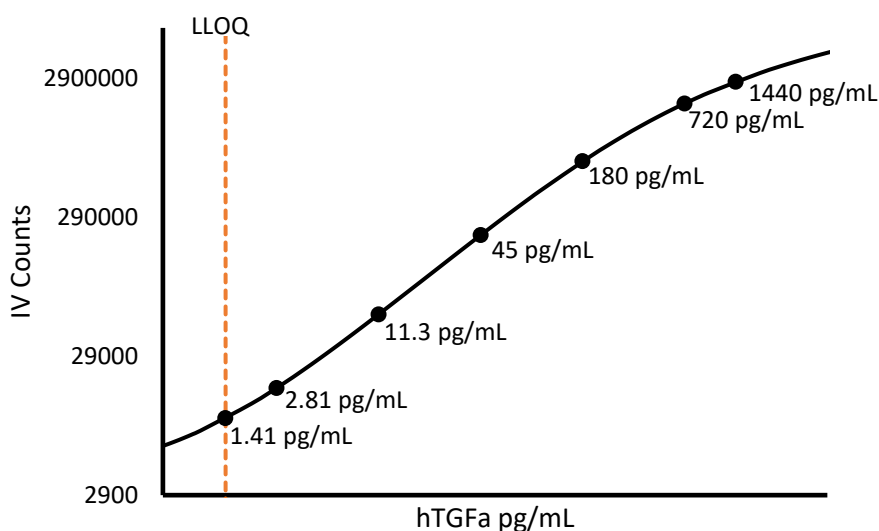


**Description – TGFα**

Transforming Growth Factor alpha (TGFα) is a 6 kDa polypeptide mitogen. Its precursor protein is a 160 amino acid integral membrane glycoprotein that is cleaved by a protease to produce the 50 amino acid mature TGFα. TGFα is produced by keratinocytes, macrophages, hepatocytes, and platelets; its synthesis is stimulated by viral infection. In mammary tissue, synthesis is stimulated by estrogen. Abundant TGFα expression is seen in transformed cells and tumors. It is expressed in modest amounts in nontransformed cells during development of mammalian embryos. TGFα is a ligand for EGFR and activates the EGFR signaling pathway promoting tumor progression by triggering downstream signaling molecules like AKT and MAPK.

**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 (1:2 Dilution)*</b>	50 µL per measurement
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\*See Kit Instructions for details

**Endogenous Serum and Plasma Readings:** Healthy EDTA plasma (n=2) and serum (n=4) samples were measured.

<b>% Above LOD</b>	<b>100%</b>
<b>% Above LLOQ</b>	<b>50%</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>1.41 pg/mL</b>
<b>Functional LLOQ (x MRD)</b>	<b>2.82 pg/mL</b>
<b>LOD</b>	<b>0.262 pg/mL</b>
<b>Assay Range</b>	<b>0 – 2880 pg/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.