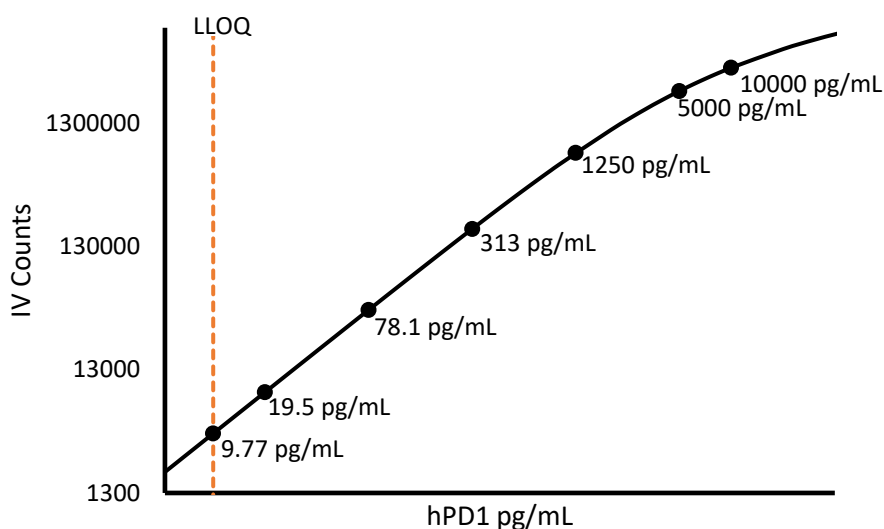


Description – PD-1

Programmed cell death protein 1 (PD-1 or CD279) is a cell surface receptor that belongs to the immunoglobulin superfamily and is expressed on T cells, B cells, monocytes, and dendritic cells. PD-1 plays an important role as an immune checkpoint. PD-1 binds to two ligands, PD-L1 and PD-L2. The PD-1/PD-L1 or PD-L2 signaling pathway is a negative regulatory mechanism that inhibits T cell proliferation and cytokine production. PD-1 inhibitors play a role in activation of the immune system and can be used for cancer treatment. Blockade of the PD-1/PD-L1 interaction enhances anti-tumor immunity and shows potential for improving cancer immunotherapy. The PD-1 pathway plays a major role in the inhibition of self-reactive T cells and protection against autoimmune diseases.

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
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*See Kit Instructions for details

Endogenous Serum and Plasma Readings: Healthy serum samples (n=10) were measured.

% Above LOD	100%
% Above LLOQ	90%

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

Analytical LLOQ	9.77 pg/mL
Functional LLOQ (x MRD)	19.5 pg/mL
LOD	1.76 pg/mL
Assay Range	0 – 20,000 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.