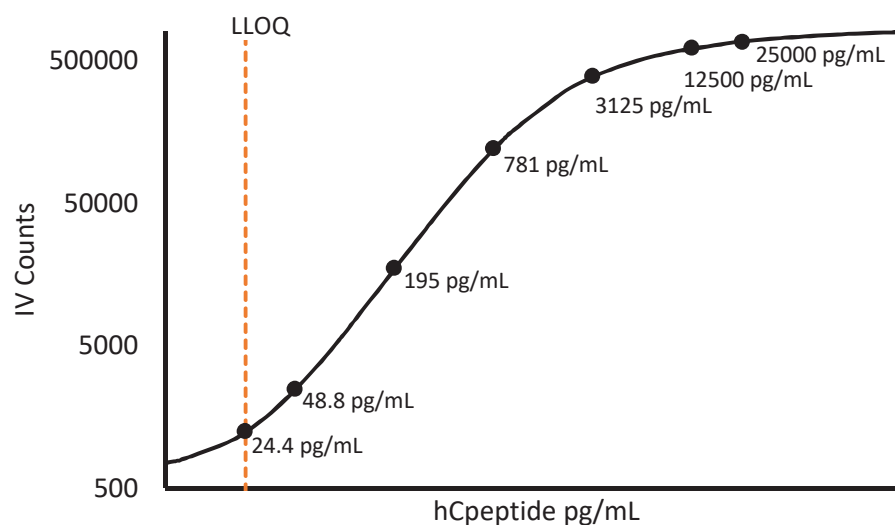


Description – C-Peptide

The connecting Peptide, or C-Peptide, is a short 31-amino-acid protein that connects insulin's A-chain to its B-chain in the proinsulin molecule. Patients with diabetes may have their C-Peptide levels measured as a means of distinguishing Type 1 diabetes from Type 2 diabetes or Maturity Onset Diabetes of the Young (MODY). Serum C-Peptide levels correlate with endogenous insulin production and surviving β -cells and are present in equimolar amounts. Ultrasensitive assays reveal C-Peptide production persists for decades after Type 1 disease onset and remains functionally responsive in patients with advanced disease, whose β -cells function was thought to have ceased.

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 (1:10 Dilution)*	50 μ L per measurement
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*See Kit Instructions for details

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

% Above LOD	100%
% Above LLOQ	80%

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

Analytical LLOQ	24.4 pg/mL
Functional LLOQ (x MRD)	244 pg/mL
LOD	15.6 pg/mL
Assay Range	0 – 250 ng/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.