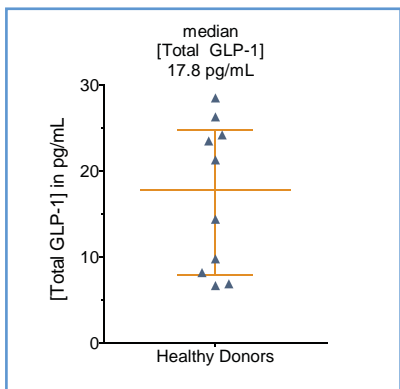
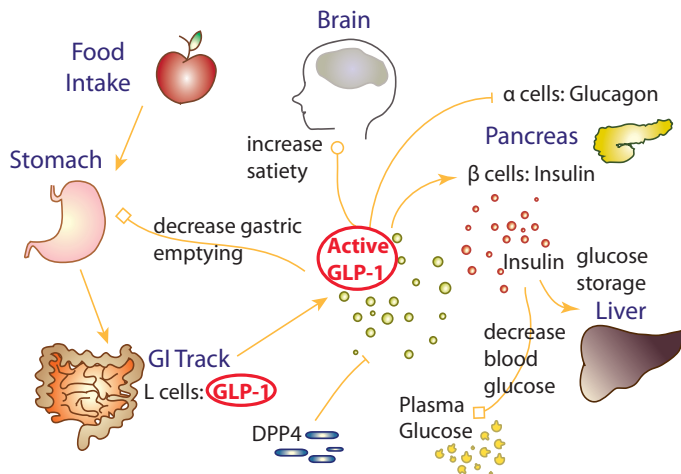


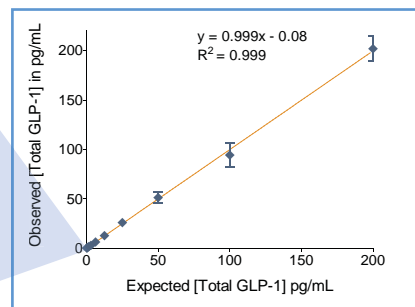
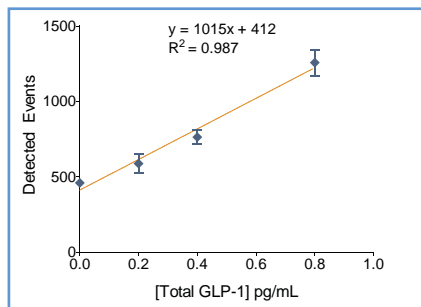
**Biology and Disease**

Glucagon-Like Peptide-1 (GLP-1) is a member of the incretin family of hormones, which are released by the gut into the bloodstream in response to food. Post-translational cleavage of the peptide produces active GLP-1, which is then rapidly degraded by protease dipeptidyl peptidase-4 (DPP-4). When blood glucose level is high, active GLP-1 enhances insulin secretion and also suppresses the release of glucagon. In addition, GLP-1 stimulates the brain to trigger feelings of satiety and regulates the rate of gastric emptying. Compared to healthy controls, some patients with type-2 diabetes show a modest decrease in GLP-1 release. Therapeutic GLP-1 analogs such as exenatide, or DPP inhibitors like sitagliptin, are promising strategies for treating type-2 diabetes.



**FIGURE 1:** [Total GLP-1] in EDTA plasma from 10 healthy donors, with median and interquartile range.

The Erenna® Total GLP-1 (MP-based) Immunoassay Kit reliably quantifies Total GLP-1 in EDTA plasma from healthy human subjects, who have a median [Total GLP-1] of 17.8 pg/mL that is well above the detection limit of 0.01 pg/mL.



**FIGURE 2:** Erenna® Total GLP-1 (MP-based) Immunoassay Kit low-end standard curve signal (left) and curve fit (right).

**TABLE 1:** Analytical sensitivity of the Erenna® Total GLP-1 (MP-based) Immunoassay Kit<sup>1</sup>

Lower Limit of Detection	0.01 pg/mL
Lower Limit of Quantification <sup>2</sup>	0.4 pg/mL
Upper Limit of Quantification	200 pg/mL
Low-end CV% Range	5 - 12%
Low-end CV% Average	9%
Recommended Sample Volume	20 µL
Minimum Sample Volume Required <sup>3</sup>	5 µL
Matrices Verified	human EDTA plasma

<sup>1</sup> see product insert for updated values

<sup>2</sup> LLoQ ≤ 20% CV and ± 20% recovery

<sup>3</sup> based upon median [Total GLP-1] in a healthy reference population



Representative data shown for demonstration purposes only. Individual results may vary depending upon samples tested and protocol used.