

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.

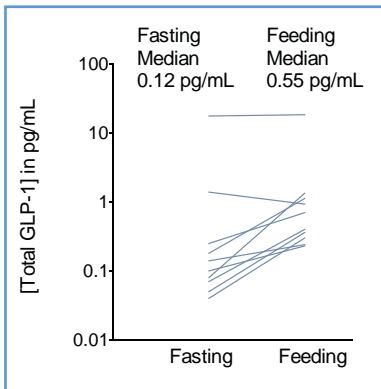
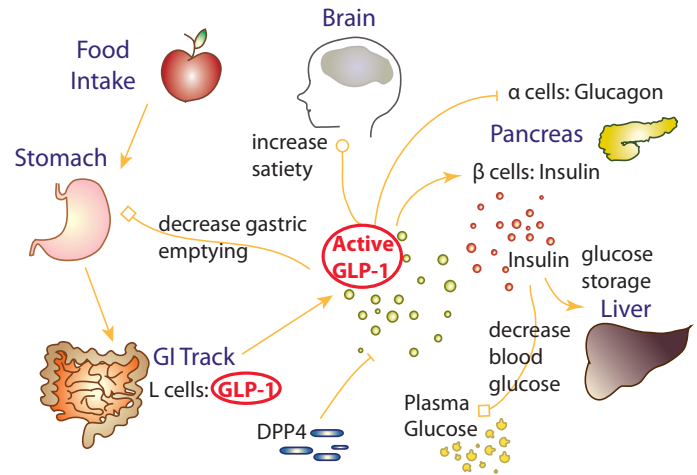


FIGURE 1: [Active GLP-1] from 9 pre- and post-feeding plasma samples, together with median concentrations.

The Erenna® Active GLP-1 (Plate-based) Immunoassay Kit reliably quantifies Active GLP-1 in healthy subjects, who have a median [Active GLP-1] of 0.12 pg/mL (fasting) and 0.55 pg/mL (feeding) that are well above the detection limit of 0.004 pg/mL.

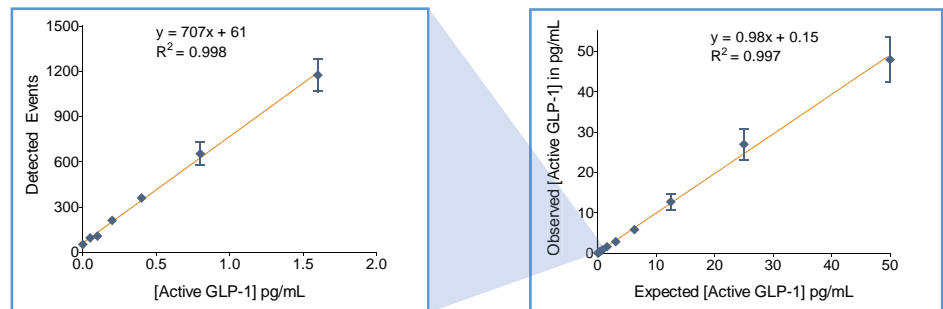


FIGURE 2: Erenna® Active GLP-1 (Plate-based) Immunoassay Kit low-end standard curve signal (left) and curve fit (right).

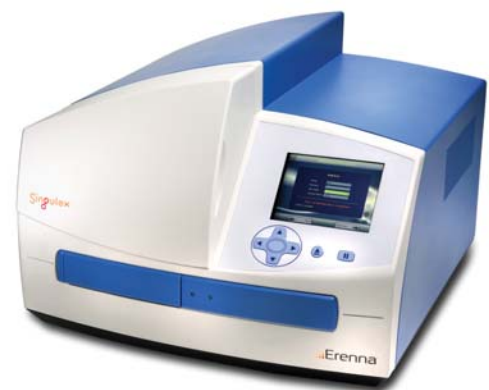
TABLE 1: Analytical sensitivity of the Erenna® Active GLP-1 (Plate-based) Immunoassay Kit¹

Lower Limit of Detection	0.004 pg/mL
Lower Limit of Quantification ²	0.1 pg/mL
Upper Limit of Quantification	50 pg/mL
Low-end CV% Range	3 - 13%
Low-end CV% Average	9%
Assay Volume	10 µL
Minimum Sample Volume Required ³	10 µL

¹ see product insert for updated values

² LLoQ ≤ 20% CV and ± 20% recovery

³ based upon median [Active 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.