Pacific Biomarkers
The Value of Expertise

GLP-1 (Glucagon-Like Peptide-1), Total

Analyte: Glucagon-Like Peptide 1 Total

Specimen Type: Plasma from BD P700 or P800, EDTA Plasma with preservatives; contact PBI for collection instructions

Optimum Volume: 0.5 mL

Stability:

2-8 Degrees C	-20 Degrees C	-70 Degrees C
6 hours	6 months	2.8 years

Reporting Units: pmol/L

Method: Electrochemiluminescent

Biological or Clinical Significance:

Glucagon-like peptide 1 (GLP-1) is a 3.5 kD incretin hormone secreted primarily from the enteroglucagon-producing L-cells in the small intestine. It is released in response to a meal and is highly potent in stimulating insulin and inhibiting glucagons secretion. GLP-1 (7-36) amide and GLP-1 (7-37) are the biologically active forms of GLP-1. In vivo, the active forms are rapidly degraded by the dipeptidyl peptidase IV (DPP-IV).

Principle of Test Method:

The GLP-1 total asay is an ultra-sensitive kit designed to quantify human total GLP-1 in human plasma, serum, and other biological media. This immunoassay employs electrochemilunimescent detection.

References:

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2. Deacon CF, Johnsen AH, Holst JJ. Degradation of glucagon-like peptide-1 by human plasma in vitro yields an n-terminally truncated peptide that is a major endogenous metabolite in vivo. J Clin Endocrinol Metab 1995; 80: 952-957.

3. Meier JJ, Nauck MA, Kranz D, Holst JJ, Deacon CF, Gaeckler D, Schmidt WE, Gallwitz. Secretion, degradation, and elimination of glucagon-like peptide 1 and gastric inhibitory polypeptide in patients with chronic renal insufficiency and healthy control subjects. Diabetes 2004; 53:654-662.

4. Kim BJ, Carlson OD, Jang HJ, Elahi D, Berry C and Egan JM. Peptide YY is secreted after oral glucose administration in a gender-specific manner. J Clin Endocrinol Metab 2005, 90: 6665-6671

Pacific Biomarkers 645 Elliott Ave W, Suite 300 Seattle, WA 98119
p: 206.298.0068 w: pacbio.com