GIP (Gastric Inhibitory Polypeptide)

Analyte: Gastric Inhibitory Polypeptide

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

Optimum Volume: 0.5 mL

2-8°C	-20°C	-70°C
3 hours	3 days	1 year

Reporting units: pmol/L

Method: ELISA

Biological or Clinical Significance:

GIP, also known as gastric inhibitory polypeptide, or glucose-dependent insulinotropic polypeptide, is a 42 amino acid peptide hormone synthesized in and secreted from K cells in the intestinal epithelium. The gut endocrine K cells sense nutrient intake and secret GIP following ingestion of the nutrients, especially fats. Unlike GLP-1, which exerts multiple non-incretin activities in the regulation of blood glucose, the primary action of GIP is the stimulation of glucose-dependent insulin secretion. GIP may also play a role in adipocyte biology and it seems to act to regulate body weight. GIP is rapidly inactivated both in vitro and in vivo by the dipeptidyl peptidase 4 (DPP-4), the enzyme which also cleaves GLP-1 and GLP-2, rapidly inactivates GIP. The majority of circulating GIP immunoreactivity in both the fasting and postprandial states corresponds to the biologically inactive GIP (amino acids 3-42).

Principle of Test Method:

The GIP assay is a solid-phase ELISA designed to measure human GIP in serum and plasma. It employs the quantitative sandwich enzyme immunoassay principle.