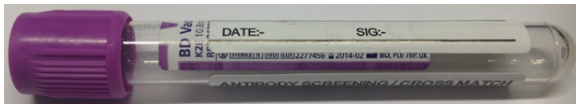
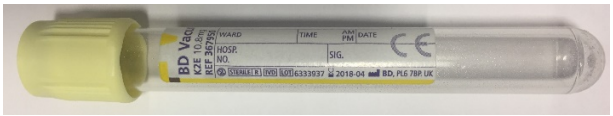
Gut Hormone Profile

Synonyms	GIT, gastrointestinal tumour markers
Clinical Indication	Diagnosis of patients with symptoms suggestive of a secreting neuro-endocrine tumour, and screening of patients with multiple endocrine neoplasia type 1. Functioning pancreatic islet cell or gastrointestinal endocrine cell tumours become clinically apparent in approximately one third of patients with MEN1. The most common cause of symptomatic disease is Zollinger-Ellison syndrome. Symptomatic disease caused by VIPomas, glucagonomas and PPomas are rare. Gastrin and Chromogranin A and B have their own test pages, please refer to these pages for further information about these tests. VIP is an inhibitory neuropeptide and in the rare pancreatic neuroendocrine tumour, VIPoma, VIP is secreted in excess. Pancreatic polypeptide is localised mainly in the pancreatic islet cells and exocrine pancreas. Abnormally high levels of PP secretion by a pancreatic NET are not associated with specific symptoms hence its inclusion in the gut hormone panel. Glucagon is produced by the pancreatic islet alpha cells. In the rare pancreatic NET, glucagonoma, glucagon is secreted in excess. Somatostatin is secreted by the pancreatic islet and endocrine D cells in the gastric and intestinal mucosa. In the rare pancreatic NET, somatostatinoma, somatostatin is secreted in excess.
Part of Profile / See Also	Gastrin, Vaso Intestinal Polypeptide (VIP), pancreatic polypeptide (PP), glucagon, somatostatin, chromagranin A & B.
Request Form	Combined Pathology manual Blood form or ICE request
Availability / Frequency of Analysis	Referred test: Analysed by Clinical Biochemistry, Charing Cross Hospital, if specific criteria met. 8673
Turnaround Time	1 month
Patient Preparation	Patient should be fasting. H2 antagonists should be stopped for 72 hours, and omeprazole for 2 weeks. Patients must attend Basildon or Southend phlebotomy for sample collection.
Sample Requirements	
Specimen Type	Plasma
Volume	2 ml
Container	 Large purple top (EDTA) tube. Or  Lemon top (EDTA)

Samples must be transported to laboratory immediately. Samples received that are > 30 minutes old may not be processed.

	Yellow top (SST) tubes should not be used.
Reference Range & Units	Gut hormone profile reference ranges: VIP: < 30 pmol/L PP: < 300 pmol/L Gastrin: < 40 pmol/L Glucagon: < 50 pmol/L Somatostatin: < 150 pmol/L Chromogranin A: < 60 pmol/L Chromogranin B: <150 pmol/L
Interferences	See patient preparation
Interpretation & Clinical Decision Value (if applicable)	A complete interpretive comment is provided by the referral laboratory
References	Imperial Pathology Test Directory – Gastrin, Chromogranin A/B, VIP, PP, glucagon, somatostatin pages Up to Date – Multiple Endocrine Neoplasia Type 1: Clinical manifestations and diagnosis. Searched Sept 2018 Up to date – Classification, epidemiology, clinical presentation, localisation and staging of pancreatic neuroendocrine neoplasms. Searched Sept 2018.
Test code	GUT
Lab Handling	Centrifuge and aliquot within 30 minutes (max 1 hour) of venepuncture into two tubes and store in the frozen referrals rack at -20°C. Ensure the sample type is written on the aliquot. Sent frozen by courier to Charing Cross Hospital.

UKAS MEDICAL
8673

Accredited to ISO 15189:2022