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| **Faecal Elastase** | | | |
| **Synonyms** | |  | E1 |
| **Clinical Indication** | |  | Human pancreatic elastase 1 (E1) remains undegraded during intestinal transit. Therefore its concentration in faeces reflects exocrine pancreatic function. The stool test quantifies Elastase 1 in faeces, allowing the diagnosis or exclusion of pancreatic exocrine insufficiency which can be caused by chronic pancreatitis, cystic fibrosis, diabetes mellitus, cholelithiasis (gallstones), ‘failure to thrive’, pancreatic cancer or papillary stenosis. Elastase 1 is recommended by the British Society of Gastroenterology as the preferred non-invasive test for pancreatic function testing.  Performed if requested by Consultant Paediatrician/Gastroenterologist or if agreed with Consultant Biochemist. |
| **Part of Profile / See Also** | |  |  |
| **Request Form** | |  | Combined Pathology manual Blood form or ICE request |
| **Availability / Frequency of Analysis** | |  | Analysed on request.  Minimum retesting interval is 6 months. |
| **Turnaround Time** | |  | 7 days |
| **Patient Preparation** | |  | The assay is highly specific for human pancreatic E1 and patients do not need to stop taking pancreatic supplements before assessment of pancreatic exocrine function |
| **Sample Requirements** | |  | Sample MUST be received in the laboratory within 3 days of collection. |
| **Specimen Type** |  | Random faecal sample.  Please note that if faecal calprotectin is also requested a separate sample is not required. |
| **Volume** |  | 1g |
| **Container** |  | Blue Capped Universal or White Capped Universal |
| **Reference Range & Units** | |  | ug/g |
| **Interferences** | |  | Samples grossly contaminated with blood and/or fibrous material, hard stools, mucous samples, neonatal samples and watery samples are unsuitable for analysis. |
| **Interpretation & Clinical**  **Decision Value (if applicable)** | |  | 200 to >500 ug/g: Normal pancreatic function  <200 ug/g: Pancreatic insufficiency. |
| **References** | |  | Guidelines for the investigation of chronic diarrhoea in adults: British Society of Gastroenterology, 3rd edition 2018. |
| **Test code** | |  | FELA |
| **Lab Handling** | |  | Store sample at 4°C upon receipt. Sample must be extracted for analysis within 3 days of receipt in the laboratory. |

