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| **Faecal Calprotectin** | | | |
| **Synonyms** | |  |  |
| **Clinical Indication** | |  | Faecal calprotectin is a cytosolic calcium binding protein released from activated neutrophils. Calprotectin is released into the faeces when neutrophils gather at the site of any GI inflammation. It can therefore provide an objective measure of GI inflammation.  Faecal calprotectin has a high negative predictive value for inflammatory bowel disease (IBD) and can be used to differentiate between IBD and Irritable Bowel Syndrome (IBS). If calprotectin is below the cut off then the patient is unlikely to have IBD.  Faecal calprotectin can also be used for early detection of relapse in IBD, monitoring disease activity and response to treatment. |
| **Part of Profile / See Also** | |  |  |
| **Request Form** | |  | Combined Pathology manual Blood form or ICE request |
| **Availability / Frequency of Analysis** | |  | Analysed on request.  The minimum retesting interval is 1 month. |
| **Turnaround Time** | |  | 7 days |
| **Patient Preparation** | |  | The first morning faecal sample should be used. Samples should not be taken for at least 3 days following colonoscopy (if required for monitoring). NSAIDs must be stopped for at least 4 weeks prior to testing. |
| **Sample Requirements** | |  | Sample MUST be received in the laboratory within 3 days of collection. |
|  | **Specimen Type** |  | Early morning stool sample |
|  | **Volume** |  | 5 grams (pea sized amount) |
|  | **Container** |  | Blue Capped Universal  Or  White Capped Universal |
| **Reference Range & Units** | |  | Reference range: <100ug/g |
| **Interferences** | |  | It should be noted that calprotectin is not distributed homogenously, and results can be variable by up to 20% on the same faecal sample.  Diverticulitis and infection (e.g. campylobacter) may cause elevated faecal calprotectin levels. NSAIDs may also cause elevation but not usually more than 200ug/g. Results from mucus like and watery samples should be interpreted with caution as mucus strongly binds calprotectin and watery samples may not contain any actual stool. |
| **Interpretation & Clinical**  **Decision Value (if applicable)** | |  | <100ug/g:- Faecal calprotectin within reference range. Unlikely to be IBD, treat as IBS.  100-250ug/g:- Faecal calprotectin indeterminate. Consider repeat after 4 weeks unless symptoms (e.g. unexplained iron deficiency anaemia) suggest earlier referral to gastroenterology. Stop NSAID for 4 weeks before retest. Ifstill raised, please refer to gastroenterology.  >250ug/g:- Faecal calprotectin raised suggestive of IBD. Suggest immediate referral to gastroenterology. |
| **References** | |  | Buhlmann kit insert  NICE CKS Inflammatory Bowel Disease. |
| **Test code** | |  | FCAL |
| **Lab Handling** | |  | Store sample at 4°C upon receipt. Sample must be extracted for analysis within 3 days of receipt in the laboratory. |