

Calprotectin

Calprotectin is a protein found in neutrophils. It is a surrogate marker of neutrophil turnover and is thus elevated in a number of inflammatory conditions. When measured in faeces it provides a direct index of neutrophil recruitment into the bowel and is thus a marker of bowel inflammation. The diagnosis and management of patients presenting to physicians with chronic diarrhoea has been hampered by the lack of a reliable specific non-invasive marker. Faecal calprotectin gives a better clinical performance than other diagnostic tests such as ESR, CRP and serological markers in distinguishing organic bowel disease (IBD) from functional bowel disorders (IBS). It appears useful in both adults and children. Faecal calprotectin is also useful in monitoring disease activity e.g. relapse and response to treatment.

Method

Immunodiagnostik ELISA utilising two monoclonal anti-human calprotectin antibodies.

Reference Ranges

<50 mg/kg within the normal range

50-200 mg/kg indicates low level bowel inflammation

>200 mg/kg significantly elevated, consistent with active IBD

For children aged 2-9 years the normal reference range is < 166mg/kg

(Source: Ann Clin Biochem 2010, 47,259-263)

Specimen Type

Faeces (small pea sized piece)

Requesting Method

Manual request form

Sample Tube

Collected in a blue top tube with an integral spoon

Collection conditions

No special collection conditions required

Transport and delivery of specimens

Calprotectin protein is very stable in faeces (1 week at ambient temperature)

Patients have 3 options for delivering their sample

- 1) Drop their specimen off with the phlebotomist if they are coming to have blood samples taken at Whittington Health.
- 2) Drop their specimen off at their GP surgery if it is one that has regular sample pick-ups by Whittington Health Couriers.
- 3) If neither option 1 or 2 is applicable the patient must bring the sample up to the pathology laboratory on the 5th floor of the outpatient block at Whittington Health where a post box is available to receive samples.

Sample Turnaround Time

7 working days