

BIOHIT CALPROTECTIN

ELISA test

Applications

- IBD differentiation from IBS
- Monitoring of mucosal healing in IBD patients
- Prediction of relapse (clinical remission)

Sampling made easy

- Consistency of the feces does not affect the result
- Only a small amount of sample required
- Easy handling with hygienic extraction tubes = reduced process time

Straightforward analysis

- Wide assay range with only one dilution 25 – 2500 mg/kg in feces
- Fits directly into automated systems (e.g. Dynex DS2)
- Validated results from a proven assay



Ordering details:

| Cat. No. | Item |
|----------|---|
| 602260 | Biohit Calprotectin ELISA kit, 96 tests |
| 602270 | Biohit Extraction Tubes, 50 pcs |

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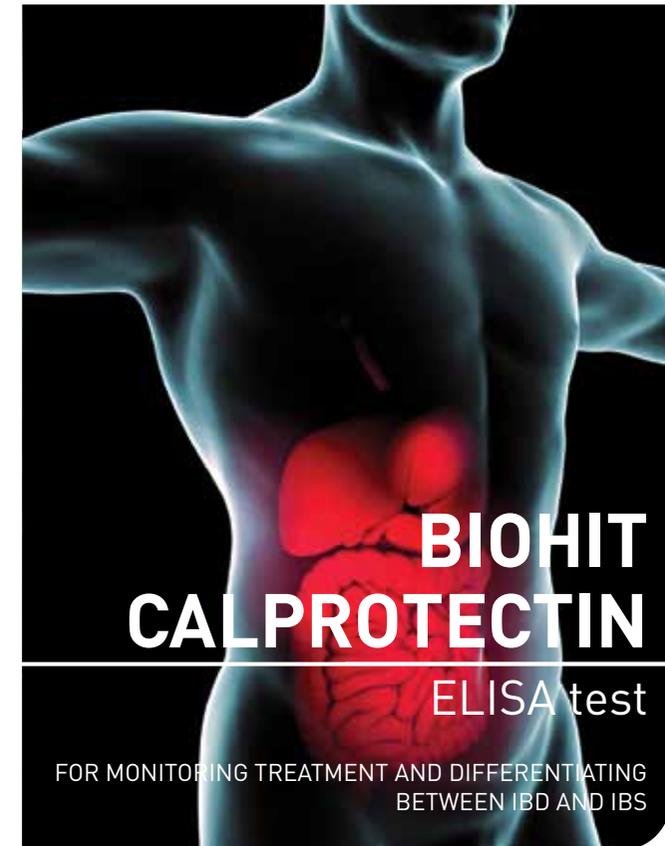
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BIOHIT CALPROTECTIN

ELISA test

Accurate test for measuring human calprotectin

Biohit Calprotectin ELISA is a quantitative test which provides a reliable differentiation between inflammatory bowel diseases (IBD) and irritable bowel syndrome (IBS). Patients suffering from either IBS or IBD may experience similar symptoms and a clinical examination alone may not be sufficient to give a specific diagnosis.

With Biohit Calprotectin ELISA, the distinction between IBS and IBD can be made non-invasively and inexpensively from a stool sample, because calprotectin test is positive only in IBD.

Biohit Calprotectin ELISA can also be used for monitoring the mucosal healing of a patient with IBD.



Short outline of the extraction using the BIOHIT extraction tubes

After equilibrating the tubes to room temperature open the tube and release the white stick (Figure 1).



Figure 1

Dip the stick into the stool sample in three different places (Figure 2).



Figure 2

Close the tube (Figure 3).



Figure 3

Vortex the assembled device vigorously for about three minutes to disrupt large particles (Figure 4).



Figure 4

Allow particles to settle by leaving the tube on the bench for a couple of minutes (Figure 5). Extracts can be stored in the extraction tube at 2 – 8°C for up to five days or frozen below -20°C for up to two years.



Figure 5

The extract is now ready for dilution according to the package insert of the assay to be used. More detailed description of extraction procedure in the package insert.

Interpretation of the results

The following Calprotectin values in stool samples have been reported in the published literature ^{1,2}:

| | |
|--|--------------------|
| Normal value | 5 – 50 mg/kg |
| Positive value | > 50 mg/kg |
| Median value in patients with symptomatic colorectal cancers | 350 mg/kg |
| Active, symptomatic inflammatory bowel disease | 200 – 40 000 mg/kg |

Note that a diagnosis should not be established based on a single test result. Diagnosis should take into consideration clinical history and symptoms.

Literature

1. Johne B et al: A new fecal calprotectin test for colorectal neoplasia. *Scand J Gastroenterol* 2001; 36: 291-296.
2. Johne B et al.: Functional and clinical aspects of the myelomonocytic protein calprotectin. *J Clin Pathol: Mol Pathol* 1997; 50:113-123.
3. Tibble J, Teahon K, Thjodleifsson B, Roseth A, Sigthorsson G, Bridger S, Foster R, Sherwood R, Fagerhol M, Bjarnason I. A simple method for assessing intestinal inflammation in Crohn's disease. *Gut* 2000;47:506-513.
4. Tibble J, Sigthorsson G, Foster R, Sherwood R, Fagerhol M, Bjarnason I. Faecal calprotectin and faecal occult blood tests in the diagnosis of colorectal carcinoma and adenoma. *Gut* 2001; 49:402-408.
5. Tibble JA, Bjarnason I. Non-invasive investigation of inflammatory bowel disease. *World J Gastroenterol* 2001;7:460-465.
6. Tibble JA, Sigthorsson G, Bridger S, Fagerhol M, Bjarnason I. Surrogate markers of intestinal inflammation are predictive of relapse in patients with quiescent inflammatory bowel disease. *Gastroenterol* 2000;119:15-22.
7. Tøn H. Improved assay for fecal calprotectin. *Clinica Chimica Acta* 2000;292:41-54.