



Technical Briefing: TECHLAB®

Diagnosis of inflammatory intestinal diseases

The need for accurate detection of inflammatory intestinal diseases

Diarrheal diseases can be classified into inflammatory and noninflammatory diarrhoea.

- Non-inflammatory diarrhoea, commonly caused by viruses and most parasites are largely effectively treated with simple oral rehydration therapy.
- Inflammatory diarrhoea tends to be more serious and need to be followed up by more extensive testing.

Lactoferrin is a marker for faecal leukocytes and an indicator of intestinal inflammation. Lactoferrin is very stable and is not degraded during infections.

Symptoms of inflammatory bowel disease (IBD), a chronic inflammatory condition, and irritable bowel syndrome (IBS), a noninflammatory condition, are similar; it is difficult to tell the two diseases apart.

Detection of lactoferrin in stool samples can be used as an *in vitro* diagnostic aid to distinguish patients with active inflammatory bowel disease (IBD) from those with noninflammatory irritable bowel syndrome (IBS).

Lactoferrin is present in the stools of people with intestinal inflammation due to IBD and *C. difficile* infection.

A test for lactoferrin can

- Act as a first step to help rule out IBS
- Quickly identify likely IBD patients for further testing
- Non-invasively assess inflammation levels for patients already diagnosed with IBD

Rapid and accurate diagnosis of gastrointestinal disease is central to a patient receiving appropriate treatment and symptomatic relief in a timely manner and is necessary to inform public health actions.

Product	Format	Product Code	Time to result
LEUKO EZ VUE®	Lateral flow	T30355	10 mins
LACTOFERRIN EZ VUE®	Lateral flow	T5018	10 mins
LACTOFERRIN CHEK®	96-well plate	T5008	75 mins
LACTOFERRIN SCAN®	96-well plate	T5009	< 60 mins



Description and Key Benefits

The TECHLAB® range of kits largely comprise two formats:

CHEK™ 96-well plate-based enzyme immunoassay (EIA)	EZ VUE® Lateral Flow Assay
<ul style="list-style-type: none">▪ ELISA-based, 96-well plate format▪ Suitable for screening large numbers of samples▪ Results within 2 hours▪ Simple procedure▪ Automatable▪ Highly standardised	<ul style="list-style-type: none">▪ Direct faecal specimen testing in a rapid assay format▪ Individual device▪ Suitable for smaller numbers of samples or for 'out-of-workflow' testing▪ Results within 10 minutes▪ Easy to interpret▪ No equipment needed▪ Highly specific and sensitive



LACTOFERRIN CHEK®



LACTOFERRIN EZ VUE®



Product information

LACTOFERRIN CHEK® (Product code: T5008)

A qualitative ELISA for the detection of elevated levels of faecal lactoferrin.

The LACTOFERRIN CHEK® can be used as an *in vitro* diagnostic aid to identify patients with active inflammatory bowel disease (IBD) and rule out those with active irritable bowel syndrome (IBS).

Patients with active IBD test positive in the LACTOFERRIN CHEK® test, whereas patients with active IBS test negative in the LACTOFERRIN CHEK® test.

- Simple-to-use microwell ELISA format
- Rapid screen to determine presence of intestinal inflammation
- Non-invasive sample
- Accurate measurement of both solid and liquid faecal samples using novel pipet design
- Highly standardised
- Results in <2 hours

LACTOFERRIN SCAN® (Product code: T5009)

A quantitative ELISA for the detection of faecal lactoferrin.

The LACTOFERRIN SCAN® test is a quantitative ELISA for measuring concentrations of faecal lactoferrin.

The test can be used as an *in vitro* diagnostic aid to distinguish patients with active inflammatory bowel disease (IBD) from those with noninflammatory irritable bowel syndrome (IBS). In addition, the test can be used to assess when an IBD patient is in confirmed remission and has responded to treatment.

- Quantitative assay to determine the concentration of faecal lactoferrin present to guide treatment decisions
- Prediluted standards
- Accurate measurement of both solid and liquid faecal samples using novel pipet design
- Non-invasive sample
- Automatable

LACTOFERRIN EZ VUE® (Product code: T5018)

The LACTOFERRIN EZ VUE® is an immunochromatographic test for the qualitative detection of elevated levels of faecal lactoferrin.

The test can be used as an *in vitro* diagnostic aid to identify patients with an active inflammatory bowel disease (IBD, a condition of chronic inflammation (elevated faecal lactoferrin) and rule out those with active noninflammatory irritable bowel syndrome (IBS).

Patients with active IBD test positive in the LACTOFERRIN EZ VUE® test, whereas patients with active IBS test negative in the LACTOFERRIN EZ VUE® test.

- Simple-to-use lateral flow format
- Individual test



- Direct faecal specimen testing in a rapid assay format
- Rapid screen to determine presence of intestinal inflammation
- Accurate measurement of both solid and liquid faecal samples using novel pipette design
- Non-invasive sample
- Results in 10 minutes

LEUKO EZ VUE® (Product code: T30355)

The *LEUKO EZ VUE*® is an immunochromatographic test for the qualitative detection of elevated levels of faecal lactoferrin.

LEUKO EZ VUE® test detects lactoferrin in liquid, semi-liquid, and solid faecal specimens. A positive test result indicates an increased level of faecal lactoferrin and warrants additional testing.

The *LEUKO EZ VUE*® overcomes the problems of microscopy by utilizing immunochromatography technology and provides results in 10 minutes.

- Rapid screen to determine presence of intestinal inflammation in acute intestinal illnesses
- Detects elevated lactoferrin in faecal specimens
- Accurate measurement of both solid and liquid faecal samples using novel pipet design
- Simple procedure that includes visual readings
- Non-invasive sample
- Results in 10 minutes

Supporting evidence

Listed below is a selection of peer-reviewed published work about the use of lactoferrin as a biomarker of inflammatory bowel disease (hyperlinked to abstract or freely available version):

- [Diagnostic accuracy of fecal lactoferrin for inflammatory bowel disease: a meta-analysis \(Wang et al., 2015\)](#)
- [Fecal lactoferrin in discriminating inflammatory bowel disease from irritable bowel syndrome: a diagnostic meta-analysis \(Zhou et al., 2014\)](#)
- [Faecal lactoferrin – a novel test to differentiate between the irritable and inflamed bowel? \(Sidhu et al., 2010\)](#)

Ordering

Product Code	Item Name	Item Units
T30355	LEUKO EZ VUE®	1 box of 25
T5018	LACTOFERRIN EZ VUE®	1 box of 25
T5008	LACTOFERRIN CHEK®	1 box of 96
T5009	LACTOFERRIN SCAN®	1 box of 96



For all order enquiries, please email enquires@unahealth.co.uk