

CerTest  
BIOTEC

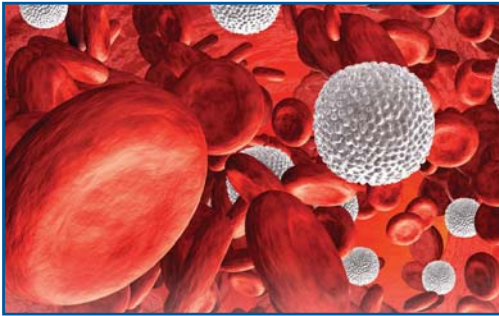
## CerTest Turbilatex



A quantitative immunological latex method

FOB | Calprotectin | *H. pylori*

## \_FOB Turbilatex®



The screening of **Faecal Occult Blood tests (FOB)** are applied to early diagnose colonic neoplasma, such as early-stage cancer and large adenomatous polyps.

Colorectal cancer is the second leading cause of illness and death in Western world. The screening with faecal occult blood tests is based on the concept that important colonic neoplasm, such as early-stage cancer and large adenomatous polyps, will bleed, for which may be detected by an occult blood test. Colorectal cancer is also associated with local acute inflammatory reaction being visualized, in some cases, by white cell neutrophil scanning.

Haemoglobin is the iron-containing oxygen-transport in the blood cells of all vertebrates that may be leaked into gastrointestinal tract and then discharged with the feces in gastrointestinal bleeding diseases.

When gastrointestinal blood is lost, the stool will contain a combination of intact or nearly intact haemoglobin, intact heme and heme-derived porphyrins in amounts that depend on the site and amount of bleeding and the transit time through the gut.

**CerTest FOB Turbilatex® detects intact or nearly intact human haemoglobin, being a very specific technique for detecting loss of blood from lower intestine.**

CerTest FOB Turbilatex® is a quantitative assay, which offers a simple, a highly sensitive and non-invasive screening assay to make a presumptive diagnosis of gastrointestinal bleeding.

### Product specifications

FOB Turbilatex®	
<b>Sensitivity (%)</b>	96 <sup>(1)</sup>
<b>Specificity (%)</b>	> 99 <sup>(1)</sup>
<b>Cut-off value (in dilution)</b>	50 ng/mL
<b>Cut-off value (in faeces)</b>	5 µg/g
<b>Main interferences</b>	None

*(Cut-off value can be modified according to laboratory needs.)*

<sup>(1)</sup> Results obtained against a similar reference product in the market



References	Description
TL-022FB100ED	<b>FOB Turbilatex Combo kit 100 det.</b>
TL-022FB200ED	<b>FOB Turbilatex Combo kit 200 det.</b>
TL-022FB400ED	<b>FOB Turbilatex Combo kit 400 det.</b>
TL-022FB03E	<b>FOB Turbilatex Sample diluent</b>

## Calprotectin Turbilatex®



Measurement of faecal **Calprotectin** would represent a surrogate marker of neutrophil influx into the bowel lumen and in turn, act as a marker of intestinal inflammation.

Calprotectin is a neutrophil cytosolic protein with antimicrobial properties, present at increased concentration in stool samples during bowel inflammation. The resistance of the protein to degradation keeps it stable in faeces for up to 7 days at room temperature, making it an ideal analyte.

Calprotectin is released by activation of leukocytes, giving increased levels in plasma, cerebral spinal fluid, synovial fluid, urine or stools as a consequence of disease in the relevant organ(s). **As it is non-invasive marker of inflammation, determination of calprotectin can be useful in the diagnosis of Ulcerative Colitis (UC) and Crohn's Disease (CD).**

**CerTest Calprotectin Turbilatex®** is a quantitative assay for the determination of human calprotectin in stool samples. It offers a simple, highly sensitivity and non-invasive screening assay to determine intestinal inflammatory activity, monitor treatment response and predict risk of relapse.

### Product specifications

Calprotectin Turbilatex®	
<b>Sensitivity (%)</b>	94 <sup>(1)</sup>
<b>Specificity (%)</b>	> 99 <sup>(1)</sup>
<b>Cut-off value</b> (in dilution)	500 ng/mL
<b>Cut-off value</b> (in faeces)	50 µg/g
<b>Main interferences</b>	None

*(Cut-off value can be modified according to laboratory needs.)*

<sup>(1)</sup> Results obtained against a similar reference product in the market



### References

### Description

TL-022CP100ED	Calprotectin Turbilatex Combo kit 100 det.
TL-022CP200ED	Calprotectin Turbilatex Combo kit 200 det.
TL-022CP03E	Calprotectin Turbilatex Sample diluent

## *H. pylori* Turbilatex®



*H. pylori* in the specimen causes a particular antigen-antibody reaction with Anti-*H. pylori* Monoclonal antibody sensitized latex and produce turbidity proportional to the amount of *H. pylori* in the specimen.

*Helicobacter pylori* (*H. pylori*) is a spiral-shaped bacterium that is found in the gastric mucous layer or adherent to the epithelial lining of the stomach.

*H. pylori* causes more than 90% of duodenal ulcers and up to 80% of gastric ulcers.

The importance of *Helicobacter pylori* testing has increased due to the strong correlation between the presence of bacteria and confirmed gastrointestinal diseases (stomach and duodenum) like gastritis, peptic ulcer disease and gastric carcinoma.

Patients suffering from gastro-duodenal ulcer may develop complications such as upper gastrointestinal bleeding or perforation.

CerTest *H. pylori* Turbilatex® is a quantitative assay for the determination of *H. pylori* in stool samples. It offers a simple, highly sensitivity and non-invasive screening assay to determine low-level inflammation of the stomach lining, duodenal and gastric ulcers and stomach cancer.

### Product specifications

<i>H. pylori</i> Turbilatex®	
Sensitivity (%)	88 <sup>(1)</sup>
Specificity (%)	> 98 <sup>(1)</sup>
Sensitivity limit	0.5 ng/mL
Main interferences	None

<sup>(1)</sup> Results obtained against a similar reference product in the market

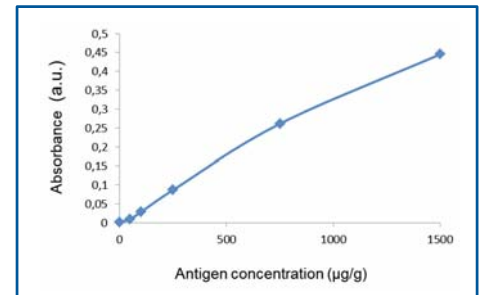
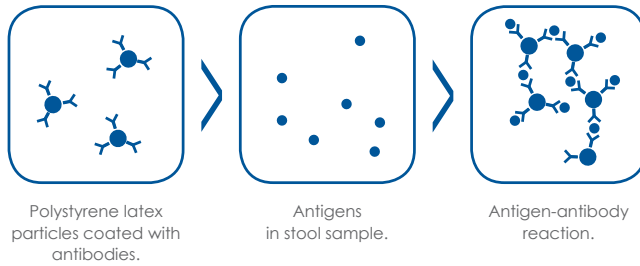


References	Description
TL-022HP100ED	<i>H. pylori</i> Turbilatex Combo kit 100 det.
TL-022HP200ED	<i>H. pylori</i> Turbilatex Combo kit 200 det.
TL-022HP03E	<i>H. pylori</i> Turbilatex Sample diluent

# Turbidimetric technique. A latex turbidimetric assay

The turbidimetric assay is based on the agglutination reaction between latex particles coated with antibody and the antigen in solution.

Turbilatex® reagents are developed to obtain a high sensitivity detection method.



Example of calibration curve for Calprotectin assay.

**The intended use for Turbilatex® products is to detect and quantify the antigen present in human stool samples.**

## Equipment needed: Biochemistry analyzer.

Space and instruments maintenance are always a problem.

Trying to minimize it, CerTest develops Tubilatex products suitable with any analyzer to reach any lab all over the world.

### Advantages:

- Completely automated system computer-controlled.
- Open-system reagents: Suitable with any analyzer.





## Turbilatex products offer:

- **High quality and reliability.**  
Concentration of the specific antigen will be determined with high accuracy.
- **Usefulness.**  
The high level of automation of the Turbilatex assay allows for optimal throughput.
- **Clearness.**  
The simplicity of the reaction implies low technical manipulation and easy interpretation by clinical technicians.
- **Easy sampling.**  
It is a complete system from sampling to results, starting and finishing with the patient.
- **Automatism.**  
User interpretation is not needed.
- **Adaptable.**  
Turbilatex reagents work with any equipment.

# Turbilatex

**CerTest**  
BIOTEC

*One step ahead*

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