# **CerTest** Turbilatex

A quantitative immundiagnostic method

FOB | Calprotectin | Transferrin | H. pylori



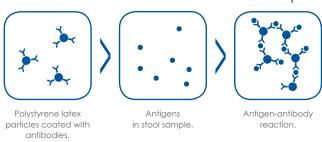


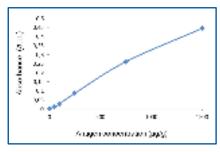
### Turbidimetric method

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

The **Turbilatex**® reagents permit a high-sensitivity detection method to be obtained.

### Turbidimetric technique





Example of calibration curve for Calprotectin assay.

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

# Equipment needed: Biochemistry analyzer

Space and the maintenance of the instruments are always a problem.

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

#### Advantages:

- · Fully automated, computer controlled system.
- · Open-system reagents: Suitable for use in any analyzer.
- $\cdot$  Not necessary to interpret results.







# Our provided kits:

#### 1. Tumoral Panel:







FOB Turbilatex® | Calprotectin Turbilatex® | Transferrin Turbilatex®

#### 2. Infectious Panel:



H. pylori Turbilatex®



### Universal diluent

We want to make your lab work easier.

Thinking in reducing our customer's bench work, Turbilatex® has developed an universal sample buffer to perform all its **Tumoral Turbilatex**® panel.







FOB, Calprotectin and Transferrin Turbilatex® Kits use the same diluent to perform the turbidimetric assay. It simplifies the work in the laboratory and makes it easier to use and test the assay.

One sampling  $\rangle$  3 assays

### **FOB** Turbilatex®

Bowel cancer is the second leading cause of death in the western world after cardiovascular disease. Among the different types of tumors, bowel cancer is the most frequently occurring in the adult population, considering both genders.

Colonic lesions considered preneoplastic (polyps) and invasive new vessel growth may bleed, even in the early stages of their development. Consequently, fecal occult blood tests (FOBT) are able to offer clinical evidence for the early diagnosis of bowel cancer in its different stages or states.

The **FOB Turbilatex**® reagents detect and quantify human hemoglobin, a protein present in blood which may be found in low concentration in patients' feces. This protein is sensitive to degradation in the gastrointestinal system, and therefore its use is limited to the detection of bleeding from the colon.

CerTest **FOB Turbilatex**® is a non-invasive immunological test which can be used in a simple and effective manner in bowel cancer screening.



#### **Product specifications**

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

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

References	Description
TL-022FB100ED	FOB Turbilatex Combo kit 100 det.
TL-022FB200ED	FOB Turbilatex Combo kit 200 det.
TL-022FB400ED	FOB Turbilatex Combo kit 400 det.
TL-022UN03E	Universal Turbilatex Sample diluent



Bowel cancer screening is a useful preventive measure for the diagnosis of preneoplastic lesions (polyps) and for the detection of invasive neoplasms in early stages.

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

# Calprotectin Turbilatex®

Inflammatory bowel disease (IBD) has different clinical forms which may affect the whole digestive tract, but more often the colon and rectum. Its importance lies in the levels of chronicity, the frequency of relapses, hospital admissions and a not insignificant risk of bowl cancer.

In addition, the incidence of the disease is clearly rising all over the world. Therefore, the use of a rapid, simple and non-invasive diagnostic tool is of great interest for the physician.

Calprotectin is a protein present in the neutrophils, which appears in high concentrations in any tissue which is experiencing an inflammatory process. In the case of patients with inflammatory bowel disease, this protein can be detected in patient feces. The protein has a high resistance to degradation, making it stable in the fecal content.

Numerous studies support the use of this marker as a diagnostic and monitoring tool for inflammatory bowel disease and severe illnesses, such as Ulcerative Colitis (UC), Crohn's disease and indeterminate colitis. It has also been considered as an initial screening method for patients with chronic diarrhea.

**CerTest Calprotectin Turbilatex**® is a non-invasive immunological assay which quantifies the calprotectin present in human feces. This simple test is able to provide quick, reliable information about the condition of the patient's inflammatory process.

References	Description
TL-022CP100ED	Calprotectin Turbilatex Combo kit 100 det.
TL-022CP200ED	Calprotectin Turbilatex Combo kit 200 det.
TL-022UN03E	Universal Turbilatex Sample diluent





#### **Product specifications**

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

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

Quantification of fecal calprotectin is one of the most widely used parameters in the analysis of inflammatory processes which affect the distal gastrointestinal tract.

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

### **Transferrin** Turbilatex®

Transferrin, like hemoglobin, is an iron-binding protein of the free iron in blood. Its presence in feces can be linked with bleeding of the upper or lower intestinal tract, as it remains stable after its passage through the gastrointestinal tract. This makes it the perfect complementary analyte in the detection of occult digestive bleeding.

This is the reason why CerTest has designed the **Transferrin Turbilatex**® turbidimetric assay, which detects and quantifies human transferrin in the same sample collection vial as **FOB Turbilatex**®.

**CerTest Transferrin Turbilatex**® is a non-invasive immunological test which can be used as a complement in the detection of FOBT. Together with **FOB Turbilatex**®, it is a sensitive specific tool for the detection of neoplasms in the colon.



#### **Product specifications**

Transferrin Turbilatex®		
95 <sup>(1)</sup>		
> 99 (1)		
10 ng/mL		
1 μg/g		
None		

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

References	Description
TL-022TF100ED	Transferrin Turbilatex Combo kit 100 det.
TL-022TF200ED	Transferrin Turbilatex Combo kit 200 det.
TL-022UN03E	Universal Turbilatex Sample diluent



The detection and quantification of fecal transferrin is a complementary tool in the early diagnosis of bowel cancer.

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

# H. pylori Turbilatex®

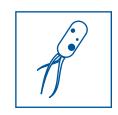
Helicobacter pylori (H. pylori) is a bacteria in helical bacillus shape, found in the human gastric epithelium in more than 50% of the global population.

There is significant correlation between the presence of this bacteria in the stomach and certain gastrointestinal diseases, including gastritis, gastroduodenal peptic ulcers, gastric carcinoma and mucosa-associated lymphoid tissue (MALT) lymphona. In particular, the presence of *H. pylori* in the stomach is indicated as a fundamental etiological factor of gastric cancer.

Therefore, the discovery of a sensitive and non-invasive method able to detect the presence of *H. pylori* quickly and without error may be of enormous use.

CerTest has developed the first turbidimetric test for the detection and quantification of an antigen present in feces when *H. pylori* colonizes the stomach.

With CerTest **H. pylori Turbilatex**® it is possible to perform a rapid, simple screening which determines the presence or absence of the bacteria in the patient's stomach.



#### **Product specifications**

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

(1) Results abtained against a similar reference product in the market

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



The bacteria
Helicobacter pylori
is involved in more
than 90% of duodenal ulcers,
and up to 80%
of gastric cancers.







## 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.

# **CerTest** Turbilatex



One step ahead

#### CerTest Biotec, S.L.

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