FOB - Transferrin - Calprotectin - Lactoferrin

Colorectal cancer is the second most significant cause of illness and death in the Western world. Blood in stools is an important symptom of colon neoplasms, the cancer in its initial stage and intestinal adenomatous polyps. Colorectal cancer is also associated with an acute, local inflammatory reaction, which can be determined in some cases by detecting neutrophils.

Transferrin is a substance derived from blood and akin to haemoglobin it can be released into the gastrointestinal tract and eliminated through faeces in illnesses associated with gastrointestinal bleeding. It is very stable in stools, making transferrin an ideal marker for detecting the loss of blood from both the upper and lower intestine (gastrointestinal bleeding). Haemoglobin is unstable in stool samples and therefore could produce false negative results. The detection of transferrin in stools, which is more stable than haemoglobin, provides an alternative method for the diagnosis of illnesses associated with bleeding from the digestive tract.

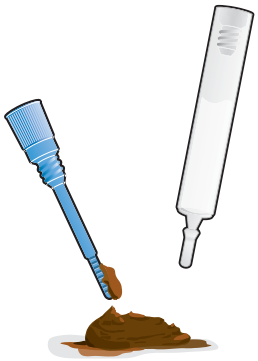
Calprotectin is a neutrophil cytosolic protein with antimicrobial properties and is present in faeces in very high concentrations during an episode of intestinal inflammation. It remains stable in stools for 7 days at ambient temperature, making it an ideal analyte.

Lactoferrin is a glycoprotein component released from faecal leukocytes during acute inflammatory response. It has been studied as an infection marker for invasive bacterial enteropathogens.

hCp and hLf have revealed themselves to be valuable aids by providing differentiation in the diagnosis of functional (e.g., irritable bowel syndrome) and organic (e.g., inflammatory bowel disease) intestinal diseases.

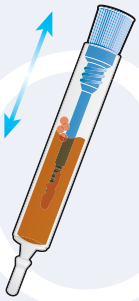
The new CERTEST combined test for FOB + Transferrin + Calprotectin + Lactoferrin provides a single, rapid and accurate test capable of simultaneously detecting the four most significant markers of intestinal bleeding and inflammation in stool samples, thus helping to diagnosis colon cancer and intestinal diseases through the combination of different markers.

Test procedure



step 1

Unscrew the cap and use the stick to pick up the sample.



step 2

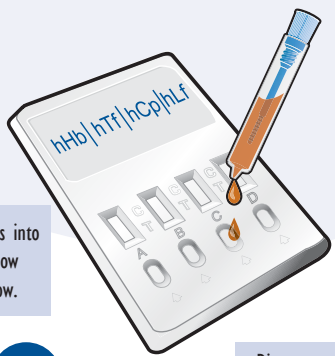
Close the tube with the diluent and stool sample. Shake the tube in order to assure good sample dispersion.

step 3

Cut the end of the cap and dispense exactly 4 drops into the "A" circular window marked with an arrow.

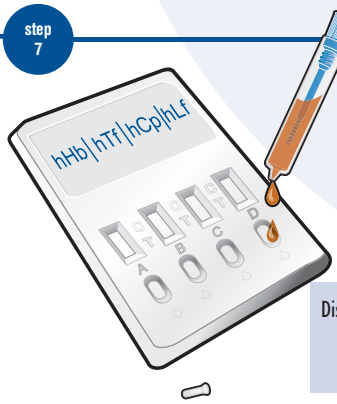
step 4

Dispense exactly 4 drops into the "B" circular window marked with an arrow.



step 5

Dispense exactly 4 drops into the "C" circular window marked with an arrow.

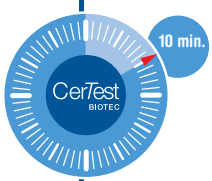


step 6

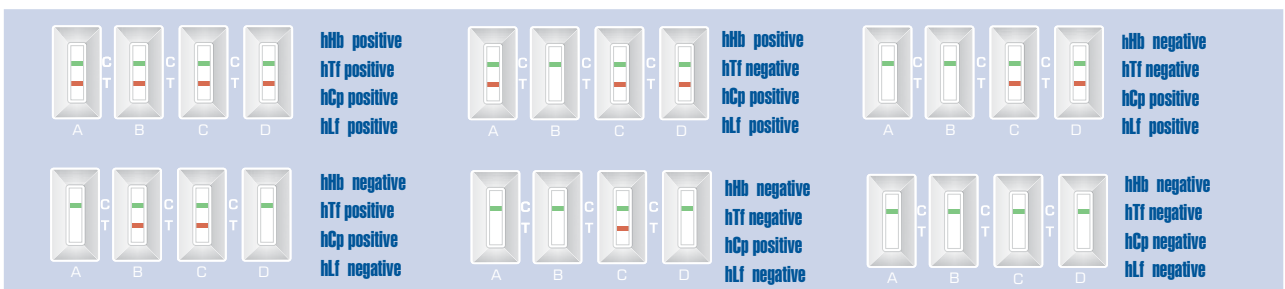
Dispense exactly 4 drops into the "D" circular window marked with an arrow.

step 7

Wait for coloured bands to appear. Read the result at 10 minutes



Interpretation of the results



	SENSITIVITY	SPECIFICITY	PPV	NPV
FOB	>99%	>99%	>99%	>99%
Transferrin	>99%	>99%	>99%	>99%
Calprotectin	>94%	93%	>94%	93%
Lactoferrin	>99%	>99%	>99%	>99%

FFC86EN

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