

Turbilatex®

FOB:

Faecal haemoglobin, a non-invasive marker of colorectal bleeding



Inflammatory
& Tumour Markers

Bowel cancer is one of the most frequent cancers in the adult population. Colonic lesions considered to be preneoplastic, such as polyps, as well as invasive neoplasms, may bleed even at an early stage of their development. For this reason, the detection of occult blood in faeces can provide useful clinical information for bowel cancer screening.

When bleeding occurs in the colon, **human haemoglobin may be present in faeces at low concentrations**. Faecal occult blood testing (FOB) enables the detection of this haemoglobin through a simple and non-invasive stool sample, supporting the identification of bleeding associated with colonic lesions.

Haemoglobin is sensitive to degradation during its passage through the gastrointestinal (GI) tract. Consequently, its detection in faeces is particularly useful for identifying **bleeding originating from the colon**, where degradation during intestinal transit is more limited.

FOB Turbilatex® Combo is a non-invasive immunological assay designed to detect and quantify human haemoglobin in faeces. The quantitative determination of faecal haemoglobin provides an effective approach for assessing occult gastrointestinal blood loss and can be easily incorporated into bowel cancer screening strategies.

Because both preneoplastic lesions, such as polyps, and invasive neoplasms may bleed before other clinical manifestations become evident, **FOB testing can support the detection of colorectal lesions at an early stage** and contribute to preventive screening programmes.

Clinical significance & applications

- Faecal occult blood (FOB) testing detects **human haemoglobin associated with colorectal bleeding**. Colonic polyps and invasive lesions may bleed even at an early stage of their development.
- FOB Turbilatex® provides a **non-invasive approach for bowel cancer screening** through the quantitative detection of human haemoglobin in faeces.



CAUSE

- Colorectal lesions may cause GI bleeding, releasing haemoglobin into the intestinal tract.
- Haemoglobin is degraded during GI transit.
- Faecal haemoglobin mainly reflects lower GI bleeding.



EFFECT / CLINICAL RELEVANCE

- Faecal haemoglobin indicates bleeding originating from the colon.
- Non-invasive detection and quantification of occult blood in faeces
- Supports bowel cancer screening, including the detection of bleeding associated with colonic lesions.

Your Laboratory Solutions for FOB

Turbidimetric FOB Assay (Latex-enhanced Immunoturbidimetry)



An immunoturbidimetric (or latex-enhanced) assay for faecal haemoglobin, suitable for open-channel chemistry analysers:

- ✔ Cost-efficient option for labs already equipped with turbidimetric platforms.
- ✔ Good throughput and precision, offering quantitative measurement of faecal haemoglobin.
- ✔ Provides flexible access to faecal haemoglobin testing without exclusive immunoassay equipment.
- ✔ Compatible with existing automated analyser platforms and integrates into gastrointestinal testing panels/workflows.
- ✔ Other complementary assays available using the same stool sample tube: Calprotectin, Pancreatic Elastase, and Transferrin.

FOB Turbilatex® Combo is a non-invasive immunological test for the detection of faecal haemoglobin, which can be used as part of bowel cancer screening.

Product specifications

Sensitivity (%)	87.5 ⁽¹⁾
Specificity (%)	97.9 ⁽¹⁾
Cut-off value (in dilution)	100 ng/mL
Cut-off value (in faeces)	10 µg/g
Main interferences	None ⁽²⁾

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

⁽¹⁾ Results obtained by comparison with similar products available on the market.

⁽²⁾ None identified in the analyses performed.

References	Description
TL-022FB100ED	FOB Turbilatex® Combo (kit 100 det.) ⁽³⁾
TL-022FB200ED	FOB Turbilatex® Combo (kit 200 det.) ⁽³⁾
TL-022FB400ED	FOB Turbilatex® Combo (kit 400 det.) ⁽³⁾
TL-022FB800ED	FOB Turbilatex® Combo (kit 800 det.) ⁽³⁾
MST-0019UR	Universal Turbilatex® Sample Collection Vial.

⁽³⁾ The number of determinations may vary depending on the analyser used. Optimized value for Biolis 24i.



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Bowel cancer screening
can support the early
detection of
preneoplastic lesions
(polyps) and invasive
neoplasms.

- Non-invasive diagnostic
- All included. No proprietary analyser required
- Low operational costs
- Ease of use and interpretation
- Immediate results