Quantum Blue® fCAL

Fecal Calprotectin in Diagnosis and Monitoring of Inflammation in IBD

- Quantitative
- Rapid
- RFID Technology
Quantification of fecal Calprotectin with Quantum Blue®

Main Advantages of Quantum Blue®

**Rapid:** The quantitative fecal calprotectin result is obtained within 12-15 minutes.

**Simple:** The test does not require special equipment and is an ideal tool for clinicians to determine the fecal calprotectin level of patients immediately.

**Reliable:** BÜHLMANN Quantum Blue® fCAL assays have been extensively proven to correlate highly with clinical findings in IBD patients.

Innovative Solution based on Lateral Flow Technology

**Lateral Flow Technology:** Quantum Blue® relies on the established lateral flow technology.

**Quantum Blue® Reader:** Optical densities of test and control lines are detected by the reader and translated into a quantitative result. This prevents misinterpretation through reading by eye.

**Highly Specific:** Highly specific monoclonal antibodies capture the calprotectin molecule.

**Quantitative:** The Quantum Blue® test result is quantitative and relies on RFID technology for gathering the information of the lot-specific standard curve.

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### 3 different Quantum Blue® fCAL Assays

<table>
<thead>
<tr>
<th>Test</th>
<th>Quantum Blue® fCAL</th>
<th>Quantum Blue® fCAL high range</th>
<th>Quantum Blue® fCAL extended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>30 – 300 µg/g</td>
<td>100 – 1800 µg/g</td>
<td>30 – 1000 µg/g</td>
</tr>
<tr>
<td>Time to Result</td>
<td>12 min</td>
<td>15 min</td>
<td>12 min</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>&lt; 30 µg/g</td>
<td>&lt;100 µg/g</td>
<td>&lt; 30 µg/g</td>
</tr>
<tr>
<td>Order Code</td>
<td>LF-CAL25</td>
<td>LF-CHR25</td>
<td>LF-CALE25</td>
</tr>
</tbody>
</table>
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Method Comparison to the BÜHLMANN fCAL® ELISA

![Graph showing comparison between BÜHLMANN fCAL® ELISA and Quantum Blue® fCAL](image)

All Quantum Blue® fCAL assays are standardised against the BÜHLMANN fCAL® ELISA.

4 Easy Steps to a Quantitative Result with Quantum Blue®

1. The Quantum Blue® fCAL assays are fully compatible with the BÜHLMANN stool extraction device CALEX® Cap.

2. A defined amount of stool extract is loaded onto the sample loading port of the test cassette.

3. Immediately after loading, the test can be started. An internal timer controls the incubation time and starts the reading process automatically.

4. At the end, the test result is displayed in µg/g. The Quantum Blue® Reader is ready for the next sample.
Quantification of fecal Calprotectin with Quantum Blue®

Excellent Clinical Validity

The Quantum Blue® fCAL rapid test shows high sensitivity and specificity in detecting relapses in both, Ulcerative Colitis and Crohn’s Disease and compares very well to the clinical performance of the BÜHLMANN fCAL® ELISA (Lobaton et al., 2012):

ROC Analysis demonstrating the accuracy of the Quantum Blue® (blue) and BÜHLMANN fCAL® ELISA (green) in predicting endoscopic activity.

Accuracy of Quantum Blue® fCAL testing to predict endoscopic Mayo score in Ulcerative Colitis.

Simplified Stool Extraction – BÜHLMANN CALEX® Cap

Stool Extraction with CALEX® Cap
All Quantum Blue® fCAL assays are fully compatible with CALEX®.

Efficient: The 1:500 dilution offers excellent efficiency in extraction.

Convenient: CALEX® uses a convenient and reliable sampling pin. The device is pre-filled with extraction buffer.

Stable: Extracts remain stable for 3 days at room temperature or 6 days at 2-8 °C. Long-term storage at -20 °C is possible for at least 18 months.

Hygienic: CALEX® is a closed system offering safe handling, storage and transport.

Order Codes:
Quantum Blue® Reader: BI-POCTR-ABS
Quantum Blue® fCAL: LF-CAL25 / LF-CHR25 / LF-CALE25
CALEX® Cap: B-CALEX-C50 / -C200 / -C500

Related Products:
Quantum Blue® sCAL: LF-MRP25
Quantum Blue® Infliximab: LF-TLIF25
Quantum Blue® Adalimumab: LF-TLAD25

CE-marked products
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