



α alphalaboratories
supplying quality to science

Quantum Blue[®] fCAL

Quantification of Faecal Calprotectin
for Diagnosis and Monitoring of
Inflammation in IBD

 **BÜHLMANN**

Quantitative

Rapid

Individually Packaged

Main Advantages of Quantum Blue®

- Rapid:** The quantitative faecal calprotectin result is obtained within 12-15 minutes.
- Simple:** The test just requires a small bench top reader and is an ideal tool for clinicians to determine the faecal calprotectin level of patients immediately.
- Reliable:** BÜHLMANN Quantum Blue® Calprotectin assays have been extensively proven to correlate highly with clinical findings in IBD patients.

Innovative Solution based on Lateral Flow Technology

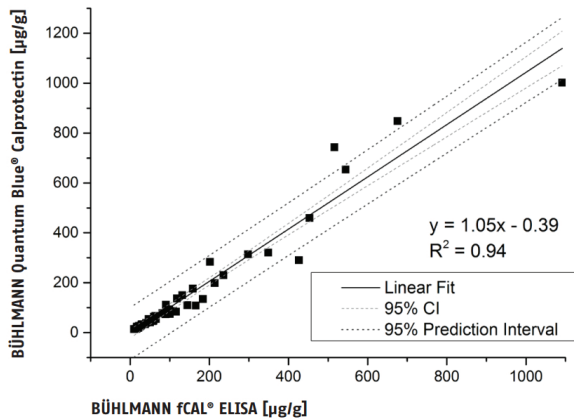
- Lateral Flow Technology:** Quantum Blue® relies on the established lateral flow technology.
- Quantum Blue® Reader:** Optical densities of test and control lines are detected by the reader and translated into a quantitative result. Other assays can also be analysed using the Quantum Blue Reader (serum calprotectin, anti-TNFα drug and antibody monitoring assays)
- Highly Specific:** Highly specific monoclonal antibodies capture the calprotectin molecule.
- Quantitative:** The Quantum Blue® test result is quantitative. The reader analyses the intensity of the test line and compares it with the lot-specific standard curve.



Two Different Quantum Blue® fCAL Assays

Test	Quantum Blue® fCAL High Range	Quantum Blue® fCAL Extended Range
Range	100 – 1800 µg/g	30 – 1000 µg/g
Time to Result	15 min	12 min
Sensitivity	<100 µg/g	< 30 µg/g
Catalogue Number	LF-CHR25	LF-CALE25

Method Comparison to the BÜHLMANN fCAL® ELISA



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

Four Easy Steps to a Quantitative Result with Quantum Blue® fCAL



1. The Quantum Blue® Calprotectin assays are fully compatible with the BÜHLMANN stool extraction devices CALEX® Cap and CALEX® Valve.



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



3. Immediately after placing the cassette into the reader, the timer is started which controls the incubation time and reads the cassette automatically.

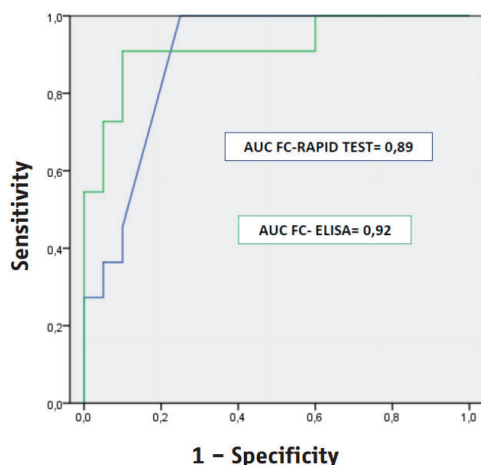


4. At the end, the test result is displayed in µg/g. The Quantum Blue® Reader is ready for the next sample.

Correlation to Clinics

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

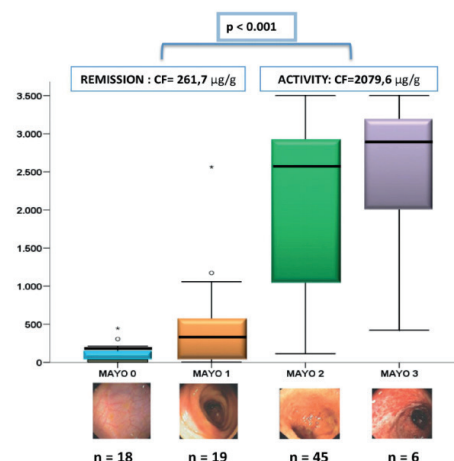
Crohn's Disease



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

Reference: Lobaton ECCO 2012, A New Rapid Test for Faecal Calprotectin Predicts Mucosal Healing in Crohn's Disease

Ulcerative Colitis



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

Reference: Lobaton ECCO 2012, A New Rapid Test for Faecal Calprotectin Predicts Mucosal Healing in Ulcerative Colitis

Simplified Stool Extraction with BÜHLMANN CALEX® Cap and Valve

All Quantum Blue® Calprotectin 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 at least 7 days at room temperature and 15 days at 2-8°C. Long-term storage at -20°C is possible for at least 23 months.
- Hygienic:** CALEX® is a closed system offering safe handling, storage and transport. It is certified leakproof to 95kPa.



CALEX® Cap



CALEX® Valve