

Automated, rapid, and flexible

CalproGold turbidimetric assay

for fecal Calprotectin

Fecal calprotectin is a well-established biomarker that is used to diagnose inflammatory bowel disease (IBD), and monitor patients with the disease during their treatment program. Turbidimetric assays are an important diagnostic tool for critical medicine, allowing rapid and sensitive measurement of disease-related biomarkers that may speak to the patient's condition, prognosis, and treatment regimen.



CalproGold is a turbidimetric immunoassay co-developed by DiAgam and Calpro for fecal calprotectin that can improve laboratory workflow. It is applicable on major open access biochemistry platforms.

The new *CalproGold* Particle-Enhanced Turbidimetric Immunoassay (PETIA) uses antibodies attached to gold particles to obtain a highly sensitive method. It is an ideal solution for high throughput applications in the laboratory. Combined with the Calpro EasyExtract™ device (CAL0510), quick and accurate extraction with pre-filled tubes further simplifies the fecal calprotectin diagnostic workflow, while reducing total assay time.

- Ideal solution for high throughput applications in the routine laboratory
- Allows random access workflow
- Easily integrated into open access immunochemistry platforms

The combination of **CalproGold** and the **Calpro EasyExtract device** reduces total assay time significantly



Direct analysis range:
32-802 mg/kg
(can be extended by dilution)



LoQ: 21,4 mg/kg
LoD: 16,9 mg/kg
LoB: 9,7 mg/kg



Correlation with
Calprolab CALP0170:
 $R^2=0,94$



Precision
Within run: CV<7%
Within lab: CV<12%



>200 samples/hour



Protocols (machine
settings) and assistance
will be provided



Shelf-life 12+ months
On-board stability:
30 days



No. of tests per kit:
100, 300, 700

Note:

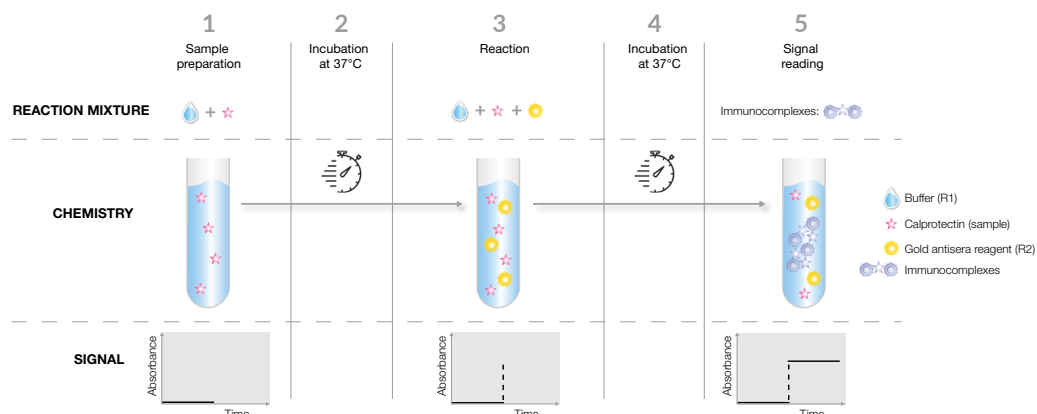
CalproGold is co-developed in collaboration with DiAgam - Rue du Parc industriel, 7822 Ghislenghien, Belgium

How does it work?

The turbidimetric assay process

The CalproGold turbidimetric assay is based on the use of anti-Calprotectin antibodies attached to gold nanoparticles. In solution, the antibodies will bind to available calprotectin molecules and result in agglutination.

The level of agglutination is related to the amount of antigen in the sample. The sample will become more turbid as antigen level in the sample increase. Sample concentration will then be inversely proportional to the amount of light that travel through the test tube.



FLEXIBLE SET UP

The CalproGold turbidimetric assay can be adapted to most open-access platforms. The assay is pre-validated on cobas/Roche and can easily be adapted to other open platforms. Our team will assist in tailoring the assay to your preferred platform.

INFLAMMATORY BOWEL DISEASE (IBD)

IBD is a chronic condition causing inflammation of the intestinal wall. Divided mainly into Crohn's Disease and Ulcerative Colitis, the patients often have overlapping symptoms. Calprotectin is important in the differential diagnosis as well as the follow-up of IBD patients, and using turbidimetric assay allows for a rapid and highly sensitive measurement of the biomarker.

SAMPLE PREPARATION AND TOTAL ASSAY TIME

Calpro EasyExtract™ is a sampling and extraction device in one, making the sample preparation both quicker and more hygienic compared to the golden standard weighing method. With a strong correlation ($R^2=0,945$) to the weighing method, the lab can reduce both handling and preparation time without compromising on the quality of the results.

Product code	Description	Volumes
CAREK-000	Calprotectin Calibrators Kit (6 Levels)	6 x 1 mL
CONTROLS (L,M,H)		
CACOS-002	Calprotectin Low Control	1 x 2 mL
CACON-002	Calprotectin Medium Control	1 x 2 mL
CACOX-002	Calprotectin High Control	1 x 2 mL
BUFFER		
SDBUF-B00	Sample Dilution Buffer	2 x 70 mL
SDBUF-H00	Sample Dilution Buffer	8 x 70 mL
SDBUF-L00	Sample Dilution Buffer	16 x 70 mL
REAGENT KITS		
CACOL-B00	Universal Kit (100t)	1 x 18 mL R1 + 1 x 7.5 mL R2
CACOL-H00	Universal Kit (300t)	3 x 18 mL R1 + 3 x 7.5 mL R2
CACOL-L00	Universal Kit (700t)	7 x 18 mL R1 + 7 x 7.5 mL R2
EXTRACTION DEVICE		
CAL0510	Calpro EasyExtract (50 pcs)	

- One-step sampling and extraction device
- Hygienic with limited handling of faeces
- No weighing, pipetting or centrifugation needed
- Tube fits straight into most open access immunochemistry platforms

