



Calprotectin ELISA

Procedure

EK-CAL

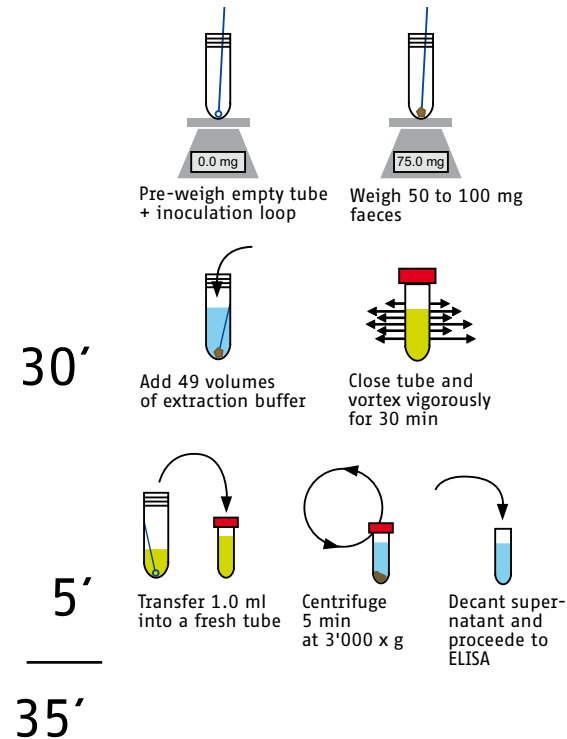
A Commitment to Diagnostics

Extraction Methods

Generell comments

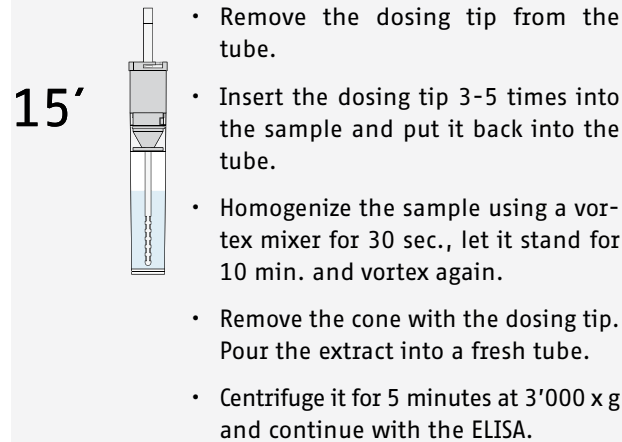
- Homogenize well. Fibrous, insoluble material occasionally present in the sample and turbidity of the final extract do not affect results.

1. Standard extraction procedure

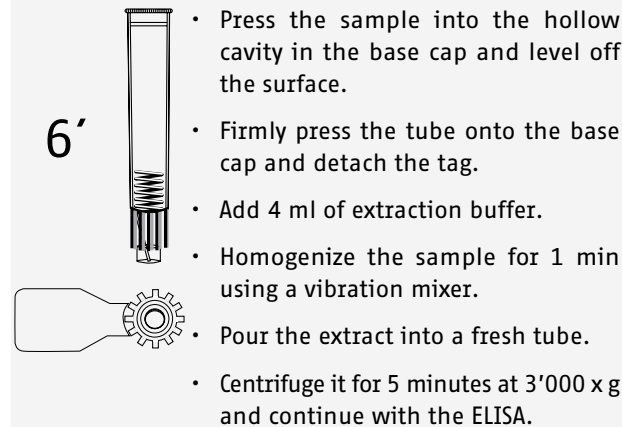


2. Extraction Devices

ScheBo® Quick-Prep™



Smart-Prep



Extraction procedures are described and illustrated in respective instructions delivered with the devices and published on the website:

<http://www.buhlmannlabs.ch/core/inflammation/calprotectin/>

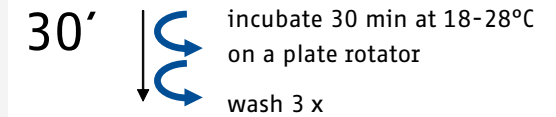
ELISA

All reagents must be adjusted to room temperature

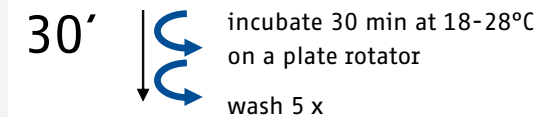
Precoated Microtiter Plate



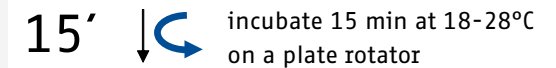
100 µl Calibrators, Controls or diluted Samples (1:50 or 1:150)



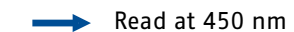
add 100 µl Enzyme Label



add 100 µl TMB Substrate



add 100 µl Stop Solution



75'

Time to Result: <2 hours





Calprotectin ELISA

Characteristics

EK-CAL

A Commitment to Diagnostics

Intended Use

Extraction and quantitative in vitro determination of human Calprotectin in stool samples.

Pre-Analytics

- Sample required: 50-100 mg human faeces
- Sample collection: plain tubes without chemical or biological additives
- Sample storage: at 2-8°C up to 6 days
do not freeze
- Storage of extracts: at ≤-20°C at least 4 months

Special Equipment

- Multi tube vortex mixer
- Precision balance (10-150 mg)
- Fecal extraction device
(to be ordered either at Roche or BÜHLMANN)
- Micro centrifuge

Calibrators & Controls

- 5 Calibrators* lower range ELISA procedure: 10-600 µg/g
extended range ELISA procedure: 30-1800 µg/g
- 2 Controls low, high

* The standard sample dilution has already been factored in the calibrators!

Assay Performance Data

For lower and extended range ELISA procedure

Intra-assay precision 4.7 %

n=6; range: 52.5-1246 µg/g
20 duplicates; CV range: 2.7-8.1 %

Inter-assay precision <15%

n=10; range: 18.1-1764 µg/g
20 repetitions; CV range: 6.6-14.5 %

Dilution linearity 103 %

12 samples diluted 1:50 up to 1:12800
recovery range: 82-124 %

Spiking recovery 100 %

2 samples spiked with native Calprotectin from human serum; recovery range: 97-103%

Analytical sensitivity <10 µg/g*1

n=20 each, in duplicates; mean + 2 SD <30 µg/g*2

Functional sensitivity <10 µg/g*1

n=28; range: 5.2-2080 µg/g
Each 20 x in duplicates; limit of acceptance 15% CV

Precision profile <15%

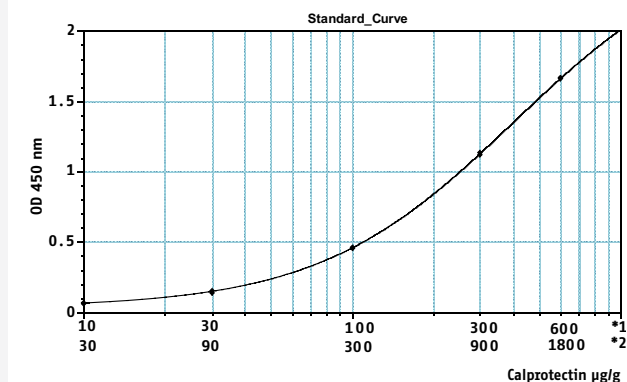
The precision profile allows a precise measurement between 10-600 and 30-1800 µg/g.

Clinical cut-off 50 µg/g

Established in a clinical study from Prof. C. Beglinger, University Hospital of Basle; n=431 patients with gastrointestinal complaints (version *1). The cut-off allows the differentiation between organic and non-organic diseases.

*1 lower range ELISA procedure
*2 extended range ELISA procedure

Typical Standard Curve (4 Parameter Logistics)



Ordering code:
EK-CAL 96 wells

Other products:
EK-MRP8/14 96 wells



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