

# Crohn's disease biomarkers

## Description

In 2014, Scientists from INRA Lab Micalis discovered and validated a panel of bacterial peptide signals associated to CD in a small group of patients in remission or moderate relapse (Juste et al. 2014). These biomarkers were absent or in very low quantity in the digestive system of CD patients in remission or outside an inflammatory period. This discovery is based on quantifications in one particular type of biological matrix (faecal microbiota purified from fresh stool).

Faecal sample patient 1



Particular peptide signals  
→ No Crohn's disease

Faecal sample patient 2



Absence of particular peptide signals  
→ Crohn's disease

## Type of expected transfer

Licence or licensing option with R&D programme.

## Advantages

Highly specific, distinction between UC and CD, non invasive diagnosis from faecal water.

## Possible applications

Early diagnosis of CD, distinction between CD and UC, monitoring of CD and treatment.

## Key words

Crohn, diagnosis, biomarker, peptide, microbiota

## TRL Scale

1 2 3 4 5 6 7 8 9

## Development level

Patent PCT/FR2015053612 covers nucleotide sequences and coding peptides from intestinal bacteria which are absent in CD patients, as well as the proteomic detection method.

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Micalis Lab

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