

TECHNO OFFER

EndoQuant: innovative direct assay of total endotoxins

sepsis / endotoxemia / gram-negative bacteria / lipopolysaccharide /
endotoxin / assay / chromatography / mass spectrometry



CONTEXT

Contamination by bacterial endotoxins causes a multitude of disorders depending on the affected area, and can lead to sepsis, a systemic inflammatory response syndrome with a mortality rate of about 30%. Thus, the detection of these endotoxins is one of the challenges in the prevention of sepsis but also of other infectious diseases in humans and animals.

DESCRIPTION

EndoQuant is an innovative assay for the direct quantification of endotoxins or lipopolysaccharides (LPS) based on liquid chromatography coupled with tandem mass spectrometry (LCMS²). It allows access to a dosage of the total LPS of many complex media (biological fluids, tissues, food...), independently of the substrate's nature. Unlike other existing methods, EndoQuant allows the detection and quantification of endotoxins in both active and inactive forms.

This very reliable, fast and safe assay provides a new tool for the sepsis diagnosis and the evaluation of the LPS neutralization capacities by different biological media.

COMPETITIVE ADVANTAGES

- Sensitive, accurate, fast and safe method
- Reliable dosing applicable to many complex media: biological fluids, tissues, food...
- Direct assay of active and inactive forms of endotoxins
- It avoids false positives and negatives in bacteriological analyses and endotoxic activity assays
- Possible association with the LAL test (Limulus Amebocyte Lysate)



Markets & applications

Medical: quantification of LPS contamination in complex media (blood, plasma, serum, bile, tissues, cell cultures...)

Agri-food: assessment of the microbiological quality of food matrices



Development stage

Reliable technology routinely used for public and industrial partners



Research team

Laboratory Lipids, Nutrition, Cancer
University of Burgundy - INSERM



Intellectual property

European patent registered on
November 13th, 2013



Target partnership

Patent licensing / R&D services

CONTACT-US

Ludmila MONTEIRO

Business Development Manager

+33 (0)6 31 10 21 21

✉ ludmila.monteiro@sayens.fr



FIND OUT OUR TECHNOLOGICAL OFFERS
www.sayens.fr

Maison Régionale de l'Innovation - 64 A rue Sully - CS 77124 - 21071 Dijon Cedex - Tel : +33 (0)3 80 40 34 80
Creation : G. Lamanna, Marketing Department / Photo credits : Adobe Stock / ©SAYENS 2018 - All rights reserved