

LUNARIST™ TECHNOLOGY

# Champion the 3Rs in Your Lab

## Kinetic cytokine profiles from single mice: fewer mice, more insights

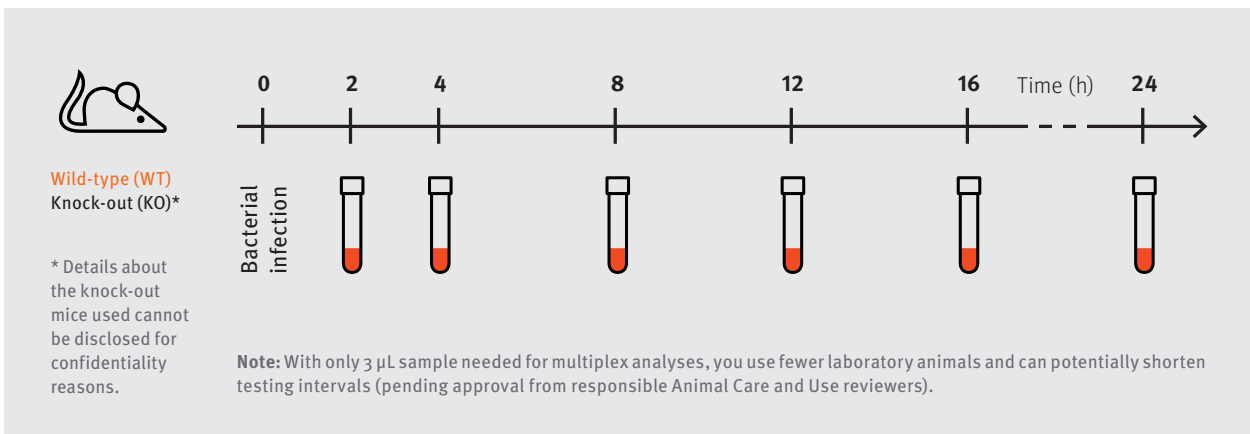
Sensitive and specific, AYOXXA's LUNARIST™ Technology requires only 3 µl of sample to measure a multiplex array of biomarkers, creating novel research opportunities in areas that rely on precious samples, and reducing lab animals or cell cultures needed in experiments.

In observance of the 3Rs of animal use in science

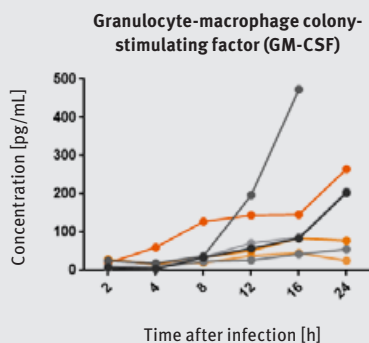
The guiding principles **Replace, Reduce and Refine** are central to a more ethical use of laboratory animals and build on maximizing information obtained from as few animals as possible.

In keeping with the 3Rs, AYOXXA's LUNARIST™ Technology enables multiplex protein quantification from 10 times less sample volume than previously possible.

Time-course data to study kinetic profiles of interesting proteins that required pooling samples from multiple animals can now be obtained from a single mouse. Thus, you can stratify inter-individual variability, use fewer animals and cut back time to result.



### Cytokine kinetics from individual mice



Low sample volume (3 µL) enables cytokine profiling from, e.g., serum of single mice, which allows detection of inter-animal variability. Depicted is a time course of GM-CSF levels, one of 12 biomarkers examined in the experiment. Orange (WT) and gray (KO) lines represent one animal each.

### Benefits

- > **Deeper insights**  
Low sample volume (3 µL) lets you look at individuals
- > **Useful stratification**  
Detect and tease out inter-animal variability to increase statistical power
- > **Ethical research**  
Gain more information with fewer animals



## LUNARIS™ Kits

- > Detect and quantify multiple disease-relevant biomarkers in sample volumes down to 3 µL
- > Applicable to a variety of clinically relevant sample types
- > Translate knowledge from mouse to man

## LUNARIS™ Reader

- > Load-and-read, fully integrated system
- > High-precision optics made in Germany
- > Two models to match your throughput
- > 96 samples read in less than 10 minutes

## LUNARIS™ Software

- > Jump-right-in software; just open a readout file
- > Complete data evaluation in less than a minute
- > Intelligent QC function for clear results reliability
- > All raw data, results, and graphs exportable to customized reports or data spreadsheets

## Make more out of less sample

Measure up to 12 biomarkers in just 3 µL of sample

**Call the experts:**  
**+49 (0) 221 222 529-0**  
3Rs@ayoxxa.com

[www.ayoxxa.com](http://www.ayoxxa.com)

**AYOXXA Biosystems** is dedicated to the vision of enabling success in translational research.

Building upon an innovative technology platform, our mission is to develop robust assay panels for translational research applications. Our LUNARIS™ multiplex protein analysis platform is optimized for translating knowledge generated in basic research to clinical studies. With its advantages in terms of quality, flexibility and efficiency, LUNARIS™ enables reliable quantification of biomarkers from model to man – from lab to clinic – from data to insight.

### HEADQUARTERS GERMANY

AYOXXA Biosystems GmbH  
BioCampus Cologne  
Nattermannallee 1  
50829 Köln, Germany  
Phone: +49 (0) 221 222 529-0  
E-Mail: sales@ayoxxa.com

### USA

AYOXXA Biosystems Inc.  
c/o Platinum CFO  
2600 Tower Oaks Blvd., Suite 220  
Rockville, MD 20852  
USA  
E-Mail: sales@ayoxxa.com