EXPLORING COMPLEMENT HOMEOSTASIS AND ACTIVATION

AYOXXA is introducing a NEW LUNARIS™ Kit

The LUNARIS™ 4-Plex Complement Kit enables simultaneous detection and quantification of the following targets in K2-EDTA plasma samples:

C3a protein, **CFD** protein (complement factor D), **CFI** (complement factor I), and **sC5b-9** (soluble terminal complement complex).

For translational research in:

› Interface adaptive / innate immune system
› Systemic inflammation (e.g., Sepsis)
› Ophthalmology (e.g., AMD)
› Infectious diseases (e.g., COVID-19)

LUNARIS™ Human 4-Plex Complement Kit

Biological relevance

The complement system is a system of plasma proteins that are activated in a cascade-like fashion to generate active components with different effector functions. It provides an important link between the innate and adaptive immune systems by participating in the induction of inflammation, opsonization of antigens, and immune clearance. Complement deficiency or dysregulation is therefore thought to play a key role in several diseases. The LUNARIS™ 4-Plex Complement Kit enables the detection and quantification of components of the classical and alternative complement pathways to gain deeper insight into the modes of complement activation in various diseases and inflammatory conditions.

Excellent data quality

Analyte	LoD	LLOQ	ULOQ	DR
C3a	3.4	6.6	4000	2.8
CFD	1.6	1.6	6000	3.6
CFI	905.7	1081.3	660000	2.8
sC5b-9	237.8	367.0	800000	3.3

Table 1: Performance
Median assay parameters determined for a ten-point standard curve (n = 10). Limit of detection (LoD), lower limit of quantification (LLOQ), and upper limit of quantification (ULOQ) given in pg/mL; Dynamic range (DR) on a log scale.

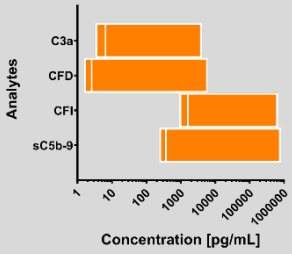

Figure 1: Performance
Bar diagram depicting the median assay parameters shown in the table to the left (n = 10).
The orange bars represent the dynamic range of the assay from LoD (left border) to the ULOQ (right border). The LLOQ is depicted as a white line.

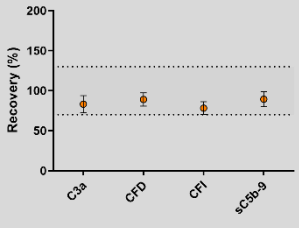

Figure 2: Accuracy
Mean recovery rate from spiked mouse blood K2-EDTA plasma samples. Error bars represent the standard deviation of three different QC sample concentrations (n = 10)
The targeted recovery range (70 to 130%) is denoted by the dotted lines/grey shaded area.

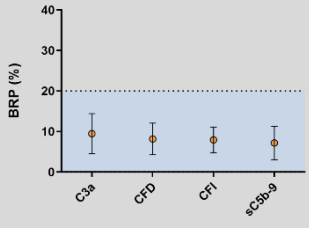

Figure 3: Precision
Quality control samples at three different concentrations were spiked into mouse blood K2-EDTA plasma samples and markers were quantified (n = 10).
Orange circles represent the mean between-run precision (BRP) of each tested analyte. The blue area denotes the required precision (< 20%).

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The all **NEW LUNARIS™ Human 4-Plex Complement-Kit** expands our portfolio of LUNARIS™ Kits designed to measure multiple protein biomarkers in a variety of clinically relevant sample types, granting **insights into disease mechanisms** and **potential therapies**, advancing translational proteomics at all stages from lab to clinic.

LUNARIS™ Technology

LUNARIS™ Kits

› Detect and quantify up to 12 disease-relevant biomarkers: **Cytokines, Chemokines, Complement & Growth factors**

› Applicable to a variety of clinically relevant sample types

› Translate knowledge from lab to clinic

LUNARIS™ Reader

› Load-and-read, fully integrated system

› High-precision optics made in Germany

› Two models to match your throughput

› Read 96 samples in less than 10 minutes

LUNARIS™ Software

› Jump-right-in software: intuitive and easy to use

› Complete data evaluation in less than a minute

› Transparent immunoassay QC functions

› All raw data, results, and graphs exportable to customized reports or data spreadsheets

EXPLORE COMPLEMENT HOMEOSTASIS & ACTIVATION

Measure **C3a, CFD, CFI, sC5b-9** in K2-EDTA plasma samples

Call the experts for more information:
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Why choose LUNARIS™ for complement research?

› **Multiplexed:** Detect and quantify multiple complement proteins and factors in one sample

› **Deep insights**: Expand biomarker profiling to Cytokines, Chemokines, and Growth factors

› **Data quality**: Excellent precision and accuracy

› **Broad dynamic range:** Over 3–4 logs scale

› **Flexible format:** For low to high sample throughput

Ordering Information

LUNARIS™ Kit	Targets	No. of BioChips	Cat. No.	No. of samples *(measured in duplicates)*
Human 4-Plex Complement	C3a CFD, CFI, sC5b-9	1 x 96 4 x 96	LHCO-20040S LHCO-20040F	40 160

For Research Use Only. Not for use in diagnostic procedures.

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