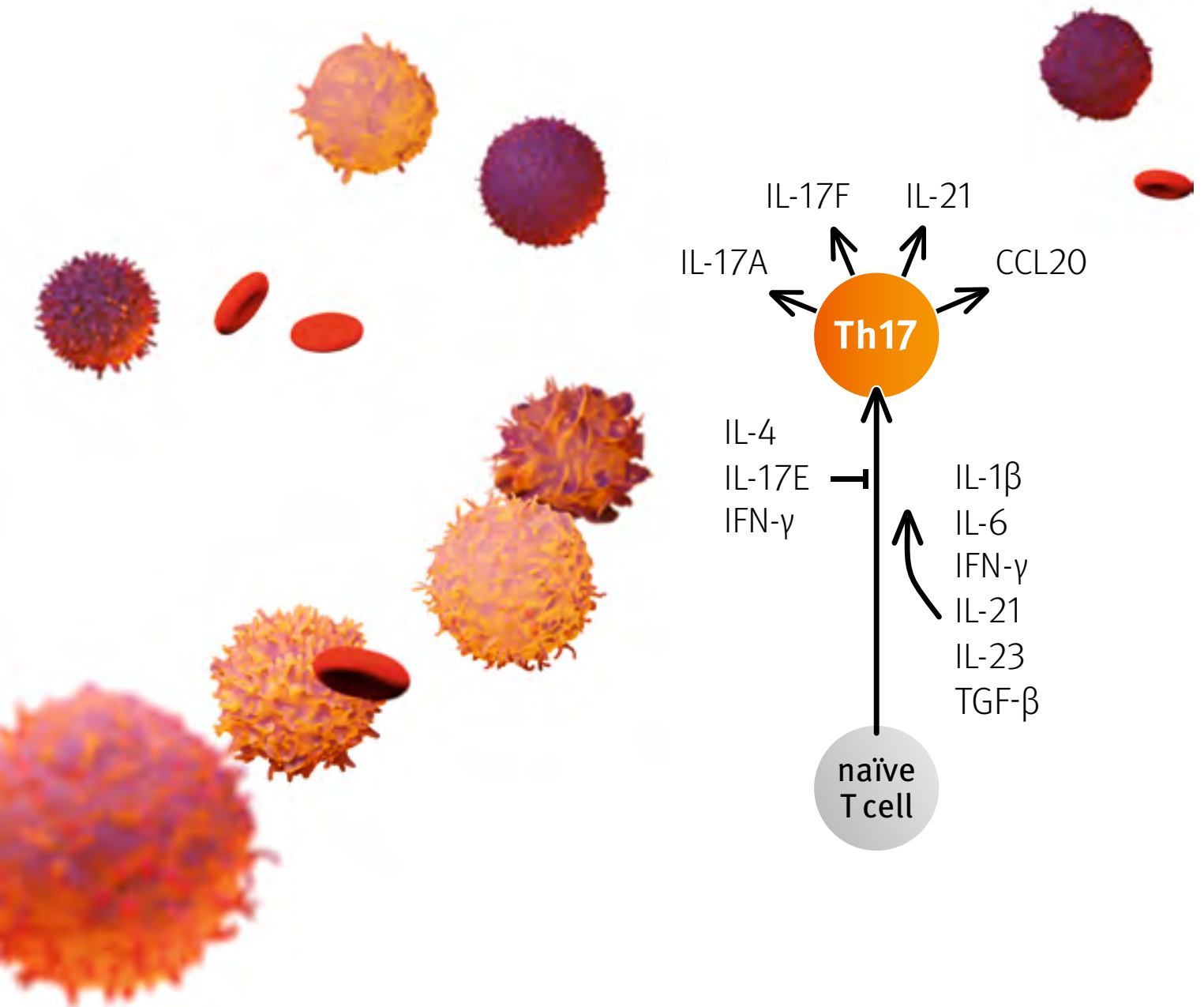


IMMUNOLOGY

Elucidating Th17 Cell Biology

LUNARIS™ Th17 Cell Biology Kits



LUNARIS™ Human & Mouse Th17 Cell Biology Kits

Validated, Scalable, Robust

- > Validated for quantitative analysis of soluble pro-inflammatory Th17 cell markers
- > Covers the primary cytokines involved in autoimmune disorders and immune-mediated diseases as well as allergy, cancer, microbial defense and transplantation
- > Enables measurement of active TGF-β1 especially in combination with IL-6 and IL-23
- > For translational research with murine and human samples



LUNARIS™ Human & Mouse 12-Plex Th17 Kits

For quantification of CCL20, IFN-γ, IL-1β, IL-4, IL-6, IL-10, IL-17A, IL-17-E, IL-17-F, IL-21, IL-23, TGF-β1

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

Th17 Cell Biology

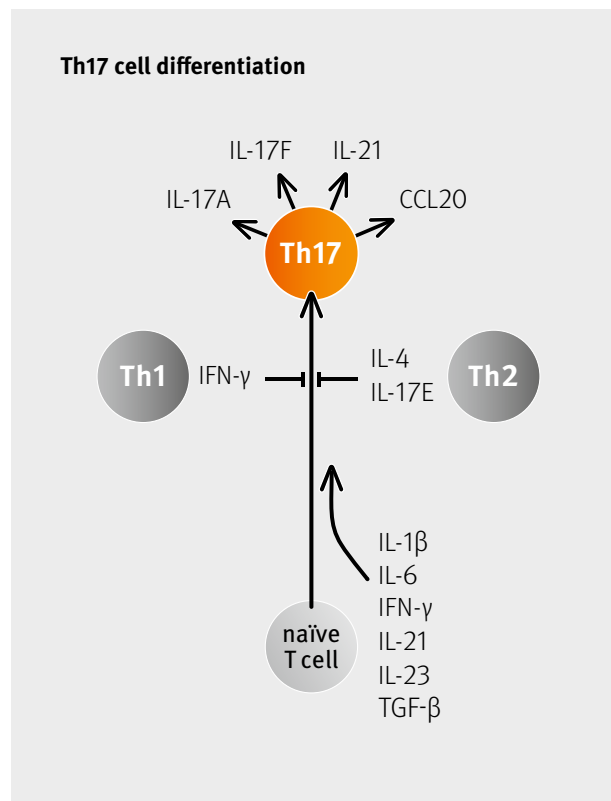
The dysregulation of the balance of Th17 cells and other immune cells has been associated with a variety of pathogenic conditions including rheumatoid arthritis, psoriasis and multiple sclerosis.

Th17 cells can be broadly divided into two groups, the host protective cell population which expresses both IL-17 A, IL-17F and IL-10, and the highly inflammatory population which expresses IL-17A, IL-17F, IL-22 and IFN-γ. The differentiation as well as the effector functions of Th17 cells are regulated by cytokines.

Activation by transforming growth factor β1 (TGF-β1) and IL-6 promotes mucosal defense and barrier tissue integrity, and curtails immunopathogenic responses, whereas IL-1β and IL-23 activated Th17 cells have been shown to cause chronic tissue inflammation during infection, granuloma formation and autoimmune response.

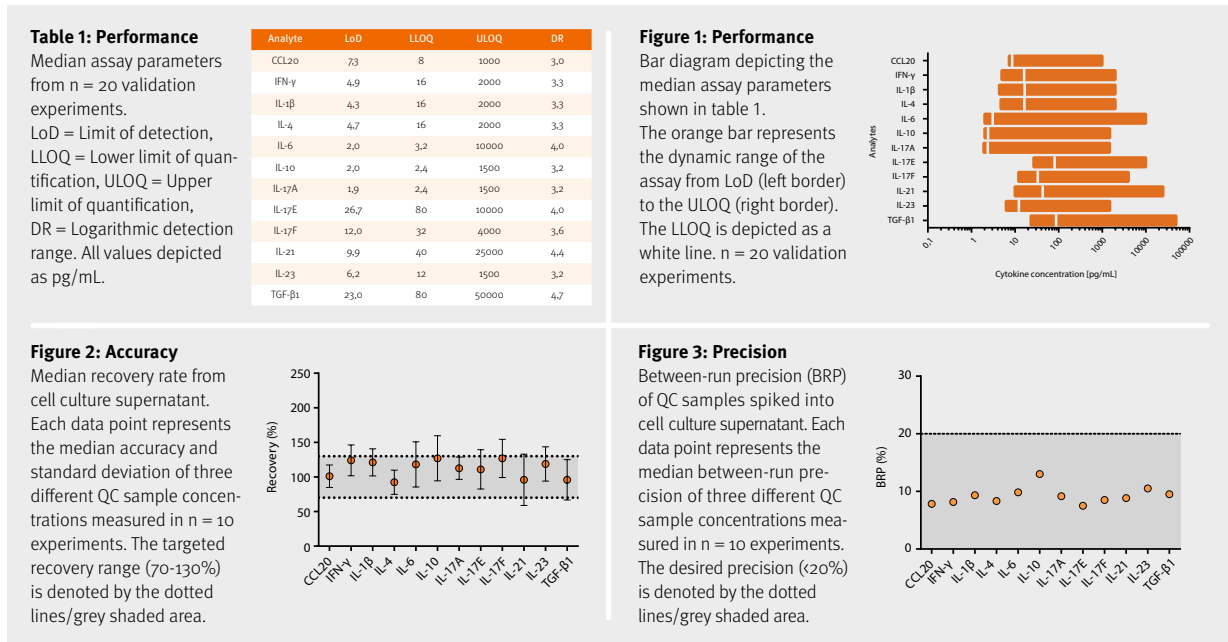
Th17 cells are relevant for:

- > Autoimmune disorders
- > Immune-mediated disease
- > Asthma diseases
- > Allergy and related disorders
- > Microbial defense
- > Cancer
- > Transplantation



Excellent Data Quality

LUNARIS™ Mouse 12-Plex Th17 Kit Validation*



*Validation data of the corresponding Human Kits are available on request.

LUNARIS™: Innovative technology for translational proteomics

- > **Ease of readout & handling**
- > **Fully integrated system**
- > **Flexible scalability from low to high-throughput**
- > **Readout of 384 samples in less than one hour**

AYOXXA's proprietary multiplexing protein analysis platform LUNARIS™ is a fully integrated and scalable system. Our system includes a dedicated reader for image-based analysis of immunoassay beads in a planar array – we read every bead, so every bead counts.

LUNARIS™ is optimized for sample volumes as low as 3 μ L, which is as little as one-tenth the volume required for similar technologies, while allowing full multiplex testing without compromising quality data or precision in precious samples.

With advantages of superior data quality, workflow flexibility and conservation of precious samples, LUNARIS™ enables reliable quantification of biomarkers from model to man – from lab to clinic – from data to insight.

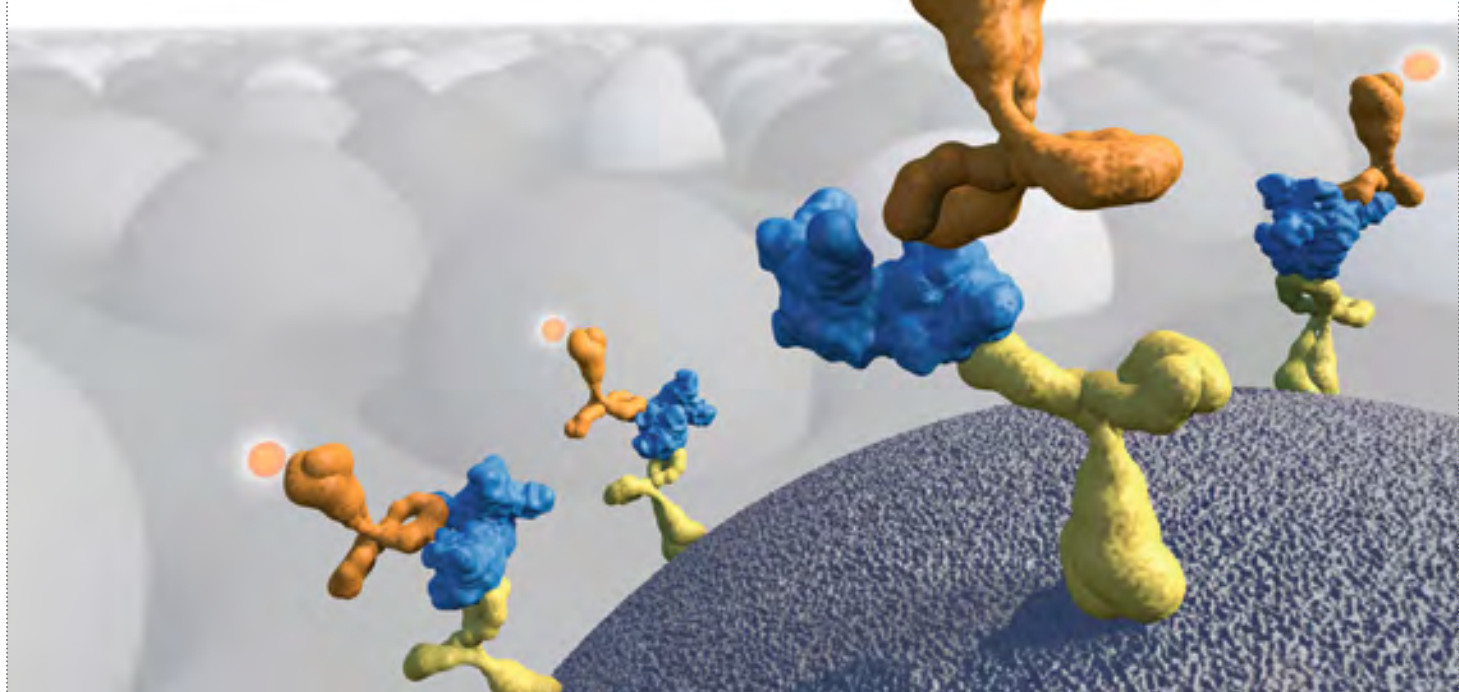
AYOXXA Services: Multiple options to access the advantages of LUNARIS™

- > **Complete testing & readout services**
- > **Send in sample for testing & receive a complete analysis report**
- > **Perform assay in your lab, send completed assay plates for readout**
- > **Innovative panel development**
- > **Custom panel configuration**
- > **Custom multiplex assay development**



LUNARIS™

AYOXXA's innovative multiplex protein technology for translational proteomics



Elucidating
Th17 Cell Biology

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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 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.

LUNARIS™	MTP plate format	# LUNARIS™ BioChips	Cat. No.	# samples in duplicates
Human 12-Plex Th17 Kit	96	1 x 32 3 x 32	LHTH-10120S LHTH-10120F	8 40
	384	1 x 96 4 x 96	LHTH-20120S LHTH-20120F	40 184
Mouse 12-Plex Th17 Kit	96	1 x 32 3 x 32	LMTH-10120S LMTH-10120F	8 40
	384	1 x 96 4 x 96	LMTH-20120S LMTH-20120F	40 184

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