

Rethinking Readouts:

FAST, FLEXIBLE EXPRESSION ANALYSIS WITHOUT ANTIBODIES

Targeted LC-MS for Cell-Based Bioassays from Screening Through Validation

A developer advancing an early-stage biologic program needed a fast, reliable way to assess protein expression as part of a cell-based bioassay — but conventional ELISA and flow cytometry approaches came with long development timelines, high reagent costs, and limited flexibility. With multiple targets to screen and no time to generate capture antibodies, they turned to Solvias for a solution that could provide quantitative protein detection, structural insight, and a clear path toward validation in a GMP environment.



THE CHALLENGES

- **No Time for Antibody Development:** Screening multiple targets or cell lines would have required significant time and cost investment to generate new ELISAs or flow-based reagents.
- **Need for Structural Confidence:** The team wanted to confirm that the expressed protein matched the intended product—not just detect its presence.
- **Long-Term Efficiency:** The customer sought a method that would not only support early-phase screening, but could ultimately be validated for use in GMP release and characterization activities.



OUR COLLABORATIVE APPROACH

- **Targeted LC-MS Protein Quantification:** Solvias applied its CBBA readout using quantitative LC-MS, eliminating the need for antibody generation and enabling rapid method set-up.
- **Multiplexing and Peptide Mapping:** The method allowed for simultaneous detection of multiple proteins and confirmation of identity via peptide-level analysis.
- **Validation-Ready Platform:** Because Solvias offers LC-MS services under GMP, the method used for screening could be directly transitioned into a validated assay—creating long-term efficiency and reducing rework.



THE RESULTS

- Rapid, reagent-free screening enabled without custom assay development.
- Multiplexed, structure-confirming readout delivered in days.
- A clear path to validation using Solvias' GMP-capable LC-MS platform.



CONCLUSION

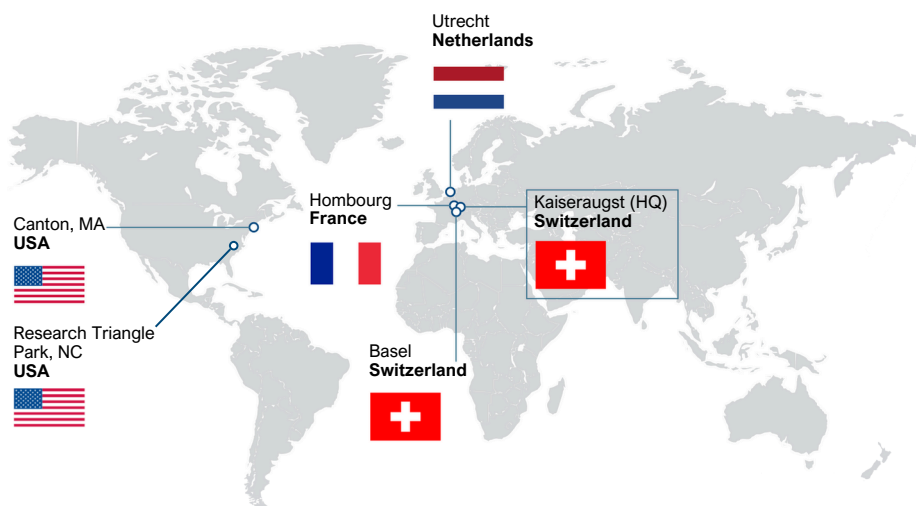
By leveraging Solvias' advanced LC-MS readout for cell-based bioassays, the customer avoided costly assay development cycles—gaining speed, flexibility, and a method built to grow with their program. In a field where most contract testing labs can't support LC-MS under GMP, Solvias offered an end-to-end solution.

Looking for more insights? Explore our full library of free cell-based bioassay resources below:

[CBBA](#)

WHY PARTNER WITH US?

- CDMO/CRO
- Founded in 1999
- 800+ team members
- 175+ PhD-level scientists
- GMP, GLP, ISO9001 certified
- 22.5K sqm of lab capacity
- 700+ customers worldwide
- 6 centers of excellence



Contact us to speak with an expert: info@solvias.com

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