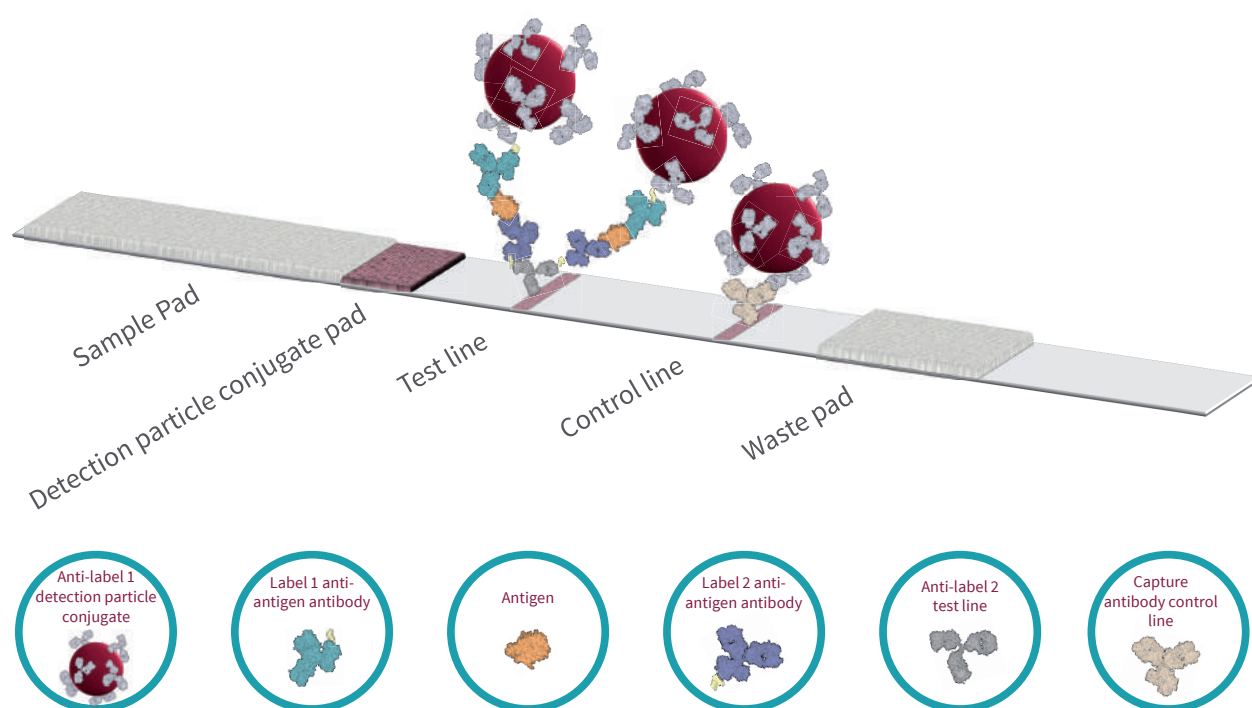


Lateral Flow Rapid Prototyping Platform

Lateral Flow Rapid Prototyping Platform

Microcoat offers an unique universal lateral flow rapid prototyping platform for fast and cost effective feasibility studies. With this platform it is possible to overcome the various obstacles of a long and often tedious lateral flow test development: e.g. material screening, development of stable detection particle conjugates and their reliable immobilization, polyhapten development and immobilization on the test strip and selection of a suitable control line system. Microcoat's rapid prototyping platform is based on a ready-to-use lateral flow strip compatible with any sandwich detection system.

Microcoat's rapid prototyping lateral flow strip



Performance of the rapid prototyping lateral flow strip

- Applicable for various - even complex - matrices (e.g. serum, aqueous extracts of food or environmental samples)
- Typical detection limit in the low ng/mL (ppb) range
- Usual testing time 3 - 10 minutes
- Suitable sample volume: 150 - 500 μ L

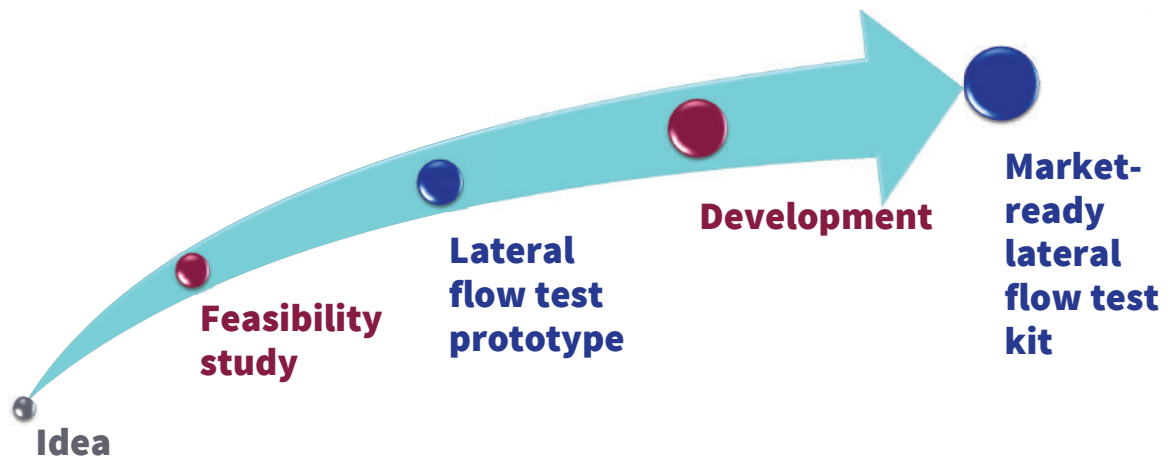
Benefits

Microcoat's rapid prototyping platform offers great opportunities for many tasks:

- Short and cost-effective proof of principle
- Simple transfer of a classical ELISA to a Lateral Flow Test
- Direct as well as competitive test format feasible (depending on analyte)
- Additional services: development of kit concept and routine production
- Simple dipstick format or assembled in cassettes

You only have to contribute your antigen, sample matrix and a pair of monoclonal antibodies or a polyclonal antibody.

Rapid Prototyping Project Phases



Idea

- Helping you with the details of your lateral flow test idea
- Determination of crucial corner points of your lateral flow idea by our team

Feasibility study

- Milestone-driven project execution
- Reliable conjugation of antibody/antibodies with specific labels appropriate for our rapid prototyping platform
- Evaluation of basic test parameters, e.g. antibody concentration and ratio, specificity and sensitivity, limit of detection (LOD) and quantification (LOQ), cross reactivity

Lateral flow test prototype

- Determination of specifications according to the results of the feasibility study
- Production of your lateral flow test prototype

Development

- Support during the decision for a kit concept including all kit components required, e.g. lateral flow strips, antibodies, buffer, labels, packaging, additional materials like pipettes, reaction tubes, swabs
- Determination of a suitable antibody conjugate preparation for your kit concept (e.g. liquid in dropper bottles, lyophilized or dried in tubes)
- Process and product verification including stability studies
- Consulting regarding regulatory aspects (e.g. IVD)
- Smooth transfer to routine production

Market-ready lateral flow test kit

- Production of your lateral flow test kit in flexible batch sizes according to your requirements

Practical example

Lateral flow prototype for analysis of inflammatory marker IL-6 in human serum

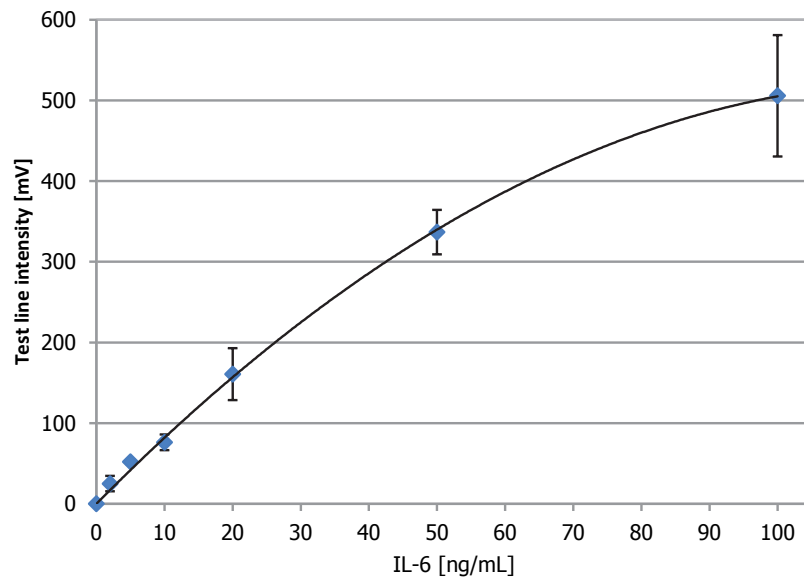
Sample: 150 μ L human serum + 50 μ L buffer

Assay time: 10 min (5 min pre-incubation, 5 min test strip run)

LOD: 2 ng/mL IL-6 in human serum

LOQ: 5 ng/mL IL-6 in human serum

Linear range: 0 - 50 ng/mL



Interested? For requests please visit:



<http://www.microcoat.de/custom-development/lateral-flow-rapid-prototyping-platform>

Find out more on www.microcoat.de

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