

# AFFIBLOT SCREENING DEVICE FOR ANTIBODY SELECTION



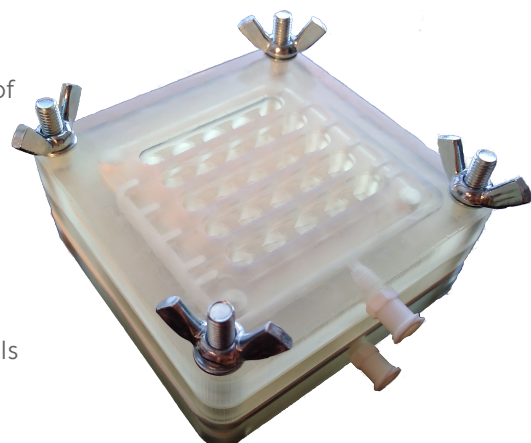
UNIVERSITY  
OF PARDUBICE  
FACULTY  
OF CHEMICAL  
TECHNOLOGY

## CHALLENGE

The increasing use of antibodies in various research fields (e.g. biotechnology) is closely related to their ever-expanding market portfolio. Thus, the selection of a suitable commercial antibody for a given application, which has appropriate affinity, high specificity, reproducibility, and low cross-reactivity, becomes crucial for this research area. A certain part of antibodies on the market does not fulfill the mentioned criteria therefore it is recommended to test the antibody before starting the experiments with them.

## TECHNOLOGY

- o Compact device based on standard procedure dot blot technology
- o Innovative lid with reagent reservoirs on the upper side and a pattern of drainage microchannels on the bottom side ensure all steps are inside the device
- o Comparison of antibodies from multiple perspectives without cutting the membrane (against dot blot)
- o Parallel evaluation of up to 5 antibodies
- o Affinity/avidity comparison
- o Determination of cross-reactivity with other biomolecules and whole cells (e.g. bacterial)
- o Batch-to-batch comparison

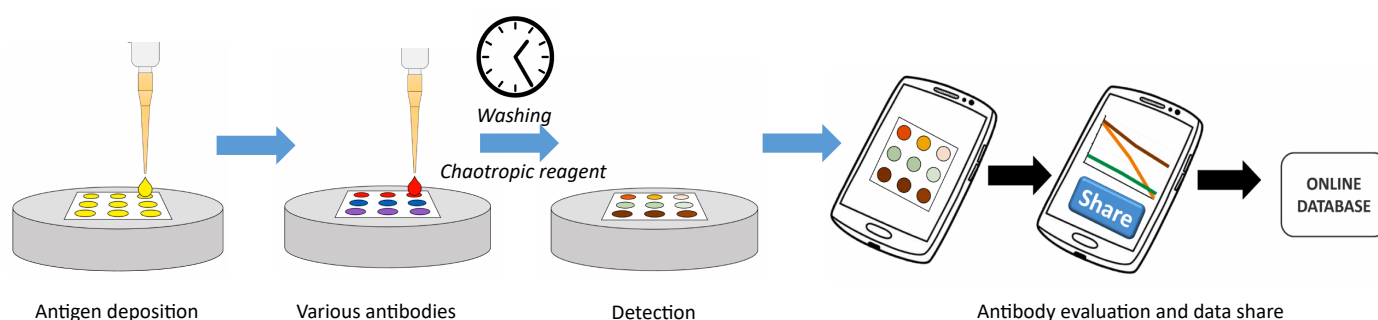


## ADVANTAGES

- o Only smartphone, vacuum pump, and software for densitometric evaluation are needed
- o Speed of assay and reproducibility
- o Easy application, disposal of reagents, and blotting membrane
- o Simplicity in interpretation
- o Easy, reproducible, and precise SLA 3D printing
- o Patented solution - reduction of time-consuming steps used in standard methods such as ELISA or Western blot

## MARKET OPPORTUNITY

All research teams and labs, that work with antibodies or other affinity reagents



## COMMERCIALIZATION STRATEGY

The invention is offered for co-development and licensing

## PATENT SITUATION

Czech patent granted, doc. No. 308111

European patent granted, doc. No. 3669983

## INVENTORS

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More information  
in the publication

