

The page features several large, semi-transparent colored circles in the corners: a green circle in the top-left, a yellow circle in the top-right, a red circle in the bottom-left, and a large red circle in the bottom-right. The word "sciomics" is centered in a lowercase, sans-serif font. Above the letters 'i', 'o', and 'm' are small colored dots in yellow, green, and light green respectively. To the right of the word "sciomics" is a cluster of five colored circles: a small red one at the top, a yellow one below it, a green one to the left, and a larger red one at the bottom right.

sciomics

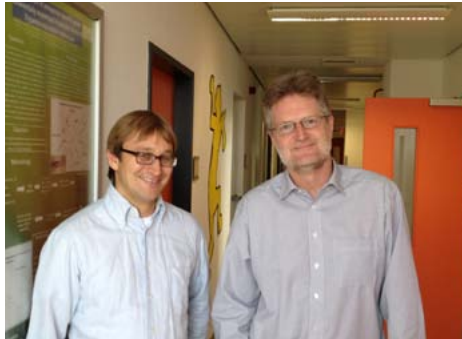
Antibody meets microarray

## About us

Sciomics was founded in spring 2013 as a spin-off company of the German Cancer Research Center (DKFZ) by Christoph Schröder and Jörg Hoheisel.

We have more than a decade of experience in the area of antibody microarrays development leading to a robust and efficient technique for a highly parallel analysis of proteins. The technology has been applied with great success in screening and profiling studies in different cancer entities in close collaboration with our clinical partners.

Sciomics offers fixed-content antibody microarrays as well as the production of fully customised arrays. Additionally, we support you with our extensive experience in microarray technology by a complete analysis service for your sample set.



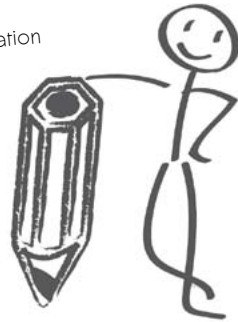
## Antibody microarrays: An efficient tool for a variety of possible applications



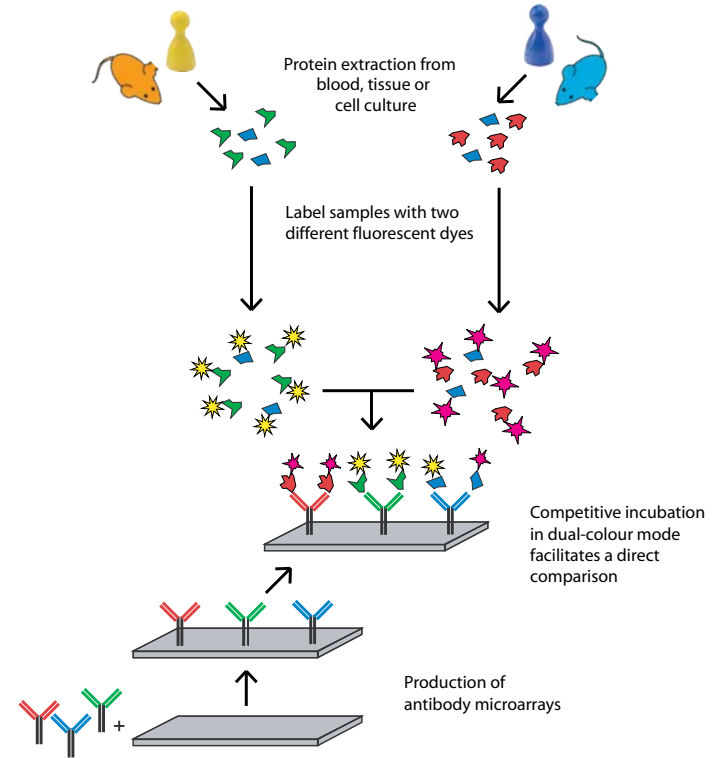
# Highly parallel analysis with antibody microarrays



- Cost and time efficient
- More data points, more knowledge
- Higher chance to identify a hit
- Robust and reproducible
- Low consumption of antibodies
- Low amount of sample required ( e.g. 15  $\mu$ L plasma )
- No need for a laborious depletion or fractionation of samples
- Variety of sample types such as plasma, serum, tissue, cell culture can be analysed on the same platform



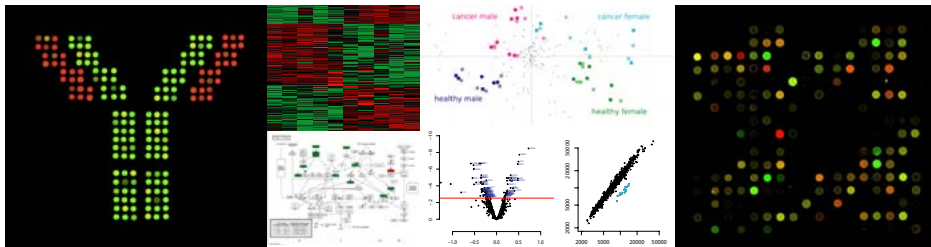
# A typical antibody microarray experiment



## Products and Services

- Standardised antibody arrays
- Production of custom microarrays (antibody, protein, DNA, ... )
- Full analysis service for microarray studies consisting of
  - production of arrays
  - protein extraction
  - labelling of samples with fluorescent dyes
  - incubation of samples on arrays
  - microarray scanning
  - spot recognition
  - data analysis

We offer a complete service for the analysis of your samples.  
Alternatively you can select individual steps to be performed by us.



## Applications: Screening of pathways



You are interested in the protein expression  
of a particular pathway ?

What about the interaction partners of your protein ?

What is the the impact of a compound  
on a pathway ?

Antibody microarrays provide you with a comprehensive picture of protein expression in a single experiment. By the highly parallel analysis you will get information on the expression of all proteins in one or multiple pathways of interest.

## Applications: Biomarker studies



You are interested in diagnostic, prognostic or predictive protein biomarkers ?

You would like to minimise the amount of sample required ?

It is a tough decision to select appropriate candidates for a verification study ?

Find the needle in the haystack !

Antibody microarrays are a robust technology for biomarker screenings or verification of multiple biomarker candidates in parallel. You consume less of your valuable samples. By the parallel analysis of multiple proteins, you increase the probability of identifying your biomarker candidate.

## Applications: Target identification



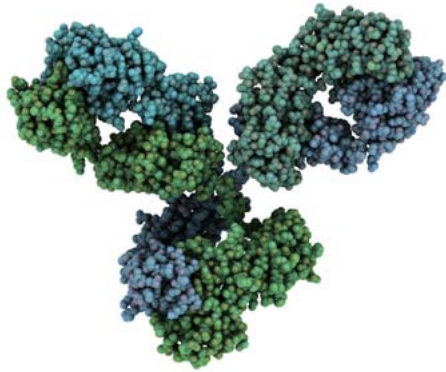
You identified a compound with the desired effect ?

You are looking for its target(s) ?

Are additional pathways affected ?

Antibody microarrays are an efficient tool to screen for targets and pathways affected by a compound or treatment. You will get the whole picture of protein expression for one or multiple pathways.

## Application: Characterisation of antibodies



Antibody microarrays facilitate a fast and cost-effective characterisation of antibodies in a parallel manner:

- analyse the binding to your target protein
- analyse cross-bindings to other proteins
- identify optimal pairs for a sandwich approach

In addition, we can help you to assess the specificity of your antibody or to characterise its exact epitop.

## Selected scientific publications

**Dual-color proteomic profiling of complex samples with a microarray of 810 cancer-related antibodies.** Schröder C, Jacob A, Tonack S, Radon TP, Sill M, Zucknick M, et al. *Mol Cell Proteomics*. 2010 9:1271-80. PMID: 20164060

**Affinity-based microarrays for proteomic analysis of cancer tissues.** Hoheisel JD, Alhamdani MS, Schröder C. *Proteomics Clin Appl*. 2013 7(1-2):8-15. PMID: 23341233

**Immunoassay-based proteome profiling of 24 pancreatic cancer cell lines.** Alhamdani MS, Youns M, Buchholz M, Gress TM, Beckers M, Maréchal D, Bauer A, Schröder C and Hoheisel JD. *J Proteomics*. 2012 75(12):3747-59. PMID: 22579748

**Analysis conditions for proteomic profiling of mammalian tissue and cell extracts with antibody microarrays.** Alhamdani MS, Schröder C and Hoheisel JD. *Proteomics*. 2010 10(17):3203-7. PMID: 20648482

**Single-Step Procedure for the Isolation of Proteins at Near-Native Conditions from Mammalian Tissue for Proteomic Analysis on Antibody Microarrays.** Alhamdani MS, Schröder C, Werner J, Giese N, Bauer A and Hoheisel JD. *Journal of Proteome Research*. 2010 9(2):963-971. PMID: 20047340

**Oncoproteomic profiling with antibody microarrays.** Alhamdani MS, Schröder C and Hoheisel JD. *Genome Med*. 2009 1(7):68. PMID: 19591665

**Assessment and optimisation of normalisation methods for dual-colour antibody microarrays.** Sill M, Schröder C, Hoheisel JD, Benner A and Zucknick M. *BMC Bioinformatics*. 2010 11:556. PMID: 21073702

**Antibody microarray-based profiling of complex specimens: systematic evaluation of labeling strategies.** Kusnezow W, Banzon V, Schröder C, Schaal R, Hoheisel JD, Rüffer S, et al. *Proteomics*. 2007;7(11):1786-1799. PMID: 17474144



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