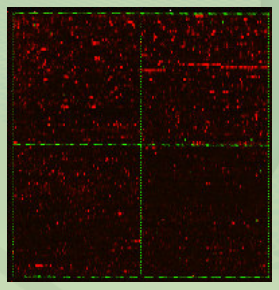
PEPperCHIP® Peptide Microarrays & Services

Antibody Validation

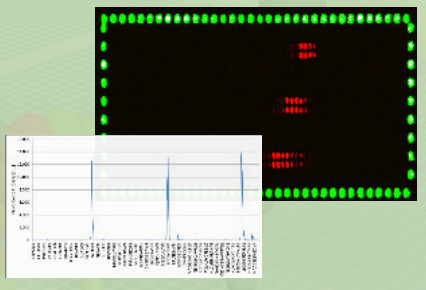
PEPperPRINT
A NEW DIVERSITY

- **Identify linear & conformational epitopes** with highest amino acid resolution
- **Determine conserved & variable amino acids** by full peptide substitution scans
- **Analyze cross-reactions and off-targets effects** of research, diagnostic & therapeutic antibodies
- **Generate antibody fingerprint profiles** for serum biomarker discovery



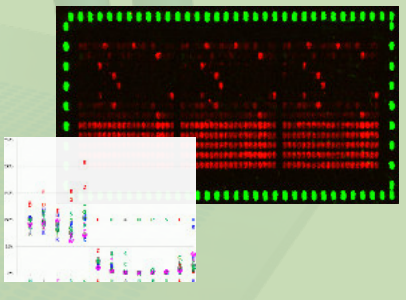
Cross-Reactivity Analysis

- Human Epitome Microarray with 29,128 linear human B-cell epitopes
- Epitome-wide antibody profiling
- Analysis of mono- & polyclonal antibodies, serum & plasma
- Bioinformatic analysis to identify common binding motifs



Linear & Conformational Epitope Mapping

- Microarray with antigen(s) as overlapping peptides
- Epitope identification with amino acid resolution
- 15 amino acid linear or 7, 10 & 13 amino acid cyclic constrained peptides with max. peptide-peptide overlap
- From single to multiple antigens in a single assay



Epitope Substitution Scan

- Exchange of all amino acid positions of a wild type peptide with the 20 natural amino acids
- Identification of essential conserved & variable amino acid positions
- Unambiquous identification of epitope lengths & epitope variants
- Assessment of antibody selectivity & cross-reactivity

Project Initiation

- Describe your scientific aim
- Submit your protein sequence(s) of interest
- Provide your antibody or serum samples

Microarray Production

- Microarray design
- Peptide printing
- Final quality control

PEPperMAP® Service

- On-chip immunoassays
- Microarray read-out
- Data evaluation

Scientific Reporting

- Incl. material & methods
- All experimental details, raw & formatted data
- Data discussion & conclusion

PÜG DIN EN ISO 9001

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PEPperCHIP® Peptide Microarrays

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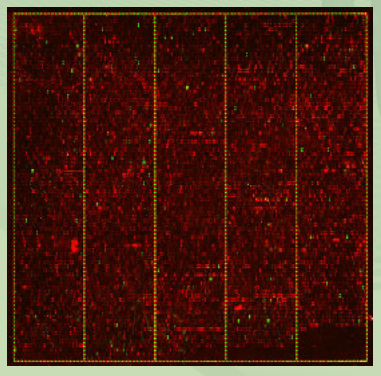
High density **PEPperCHIP® Peptide Microarrays** are fully tailored to your scientific needs from single or multiple antigens as overlapping **linear or cyclic constrained peptides** to large scale peptide libraries or proteome wide analyses. Get access to the most flexible and cost-effective peptide microarray technology from multiple array copies to tens of thousands of peptides per chip. High quality PEPperCHIP® Peptide Microarrays are designed and generated under ISO 9001-certified conditions by peptide **laser-printing in only 4 weeks.**

Discovery Format

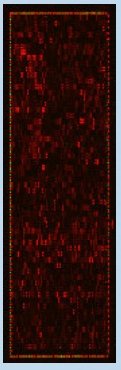


1
test per chip

< 75,460
peptides per chip

Biomarker Discovery

Standard Format

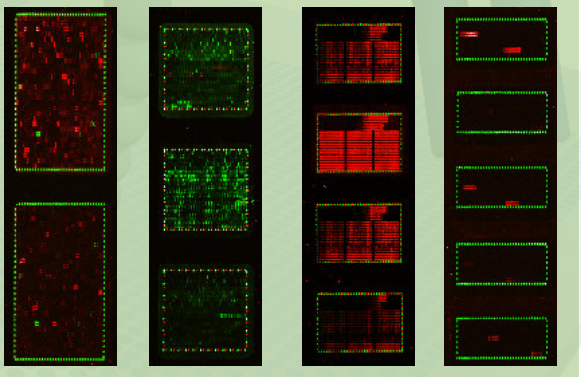


1
test per chip

< 11,288
peptides
per chip

Multiplexed protein mapping

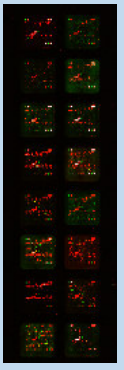
Mapping Formats



2	3	4	5
tests per chip	tests per chip	tests per chip	tests per chip
< 5,032 peptides per array copy	**< 2,856** peptides per array copy	**< 2,040** peptides per arry copy	**< 1,632** peptides per array copy

Single to multiplexed protein mapping

Multiplexed Formats



16
tests per chip

< 273
peptides
per array copy

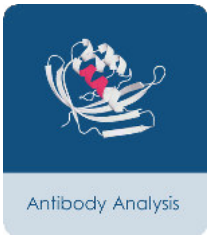
Hit validation

Benefits:

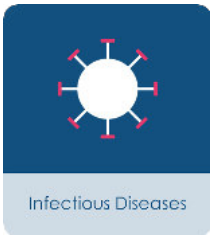
- Linear and cyclic constrained peptides up to 20 amino acids
- Proteins as overlapping peptides or custom peptide collections
- Highest peptide microarray spot density
- Multiple array copies per chip for one-by-one experiments
- Positive control peptides included
- Optional PEPperMAP® Services

Applications:

- Antigen and epitope discovery
- Linear and conformational epitope mapping
- B-cell immune monitoring for vaccine development
- Antibody biomarker discovery for IVD and CDx development
- Protein interaction analysis


Antibody Analysis


Autoimmune Research


Infectious Diseases


Cancer Research


Allergy Research


Vaccine Development

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