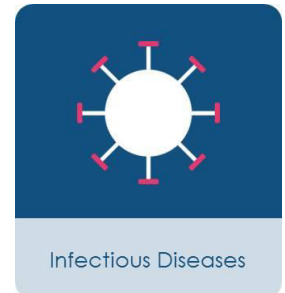


A Disruptive New Technology for Infectious Disease Research!

Only PEPperPRINT's unique peptide microarray platform enables you to

- ✓ pinpoint and profile every possible infectious disease throughout an entire patient population
- ✓ differentiate between similar pathogens on the epitope level
- ✓ order custom microarrays with up to 35,500 high fidelity peptides
- ✓ reliably receive your custom peptide microarrays within 3-5 weeks
- ✓ adjust your microarray from chip to chip and obtain rapid readouts
- ✓ benefit from the highest signal-to-noise ratios available



Here are some examples of PEPperPRINT's infectious disease microarray applications:

- Screening for neutralizing antibodies against different viral strains for a top 10 pharma company
- In-depth assessment of antibody binding to key HIV-1 epitopes for a world-class research institute
- Differentiation of flavivirus responses on the epitope level in a multinational research consortium

What our customers say:

"We were working with the PEPperCHIP® platform for the first time in order to map epitopes in the envelope protein of a new emerging virus. The provided protocol was easy to perform and staining with the recommended antibodies resulted in explicit results. The provided software PepSlide Analyzer had all tools we needed for a detailed evaluation and was easy to use. Special thanks to the support team of PEPperPRINT. Every kind of question was answered sufficiently within a very short time."

Robert Fux, PhD, Institute of Infectious Diseases and Zoonoses, LMU Munich

"We used PEPperPRINT's Infectious Disease Epitope Microarrays to analyze the serological response to pathogens in patients with autoimmune disease. I can highly recommend PEPperPRINT - the support I received for both technical queries and data analysis exceeded all my expectations!"

Dr. Miriam Jane Ball, Medical University of Vienna

"We have used the 'Epitope Mapping Service' from PEPperPRINT and the quality of results produced and professionalism of the service surpassed our expectations. The results obtained are very useful for our research and I would not hesitate to use this service in the future or to recommend it to fellow researchers working in the field."

Javier Castillo-Olivares, PhD, Orbivirus Immunology, The Pirbright Institute, Woking

Our **disruptive PEPperCHIP® Peptide Microarray** technology offers a variety of solutions for infectious disease screening:

PEPperCHIP® Infectious Disease Epitope Microarray 3.0

- covers 3,760 database-derived B-cell epitopes of the Immune Epitope Database (www.iedb.org)
- epitopes of 196 different pathogens including bacterial, fungal, parasitic and viral pathogens
- ▶ **multiplexed screening of IgG, IgM and IgA antibody responses against a variety of pathogens in a single assay**

PEPperCHIP® Human Epitome Microarray

- covers all linear human B-cell epitopes of the Immune Epitope Database
- 29,128 different peptides covering cancer, infectious diseases, autoimmune diseases, allergens, various other diseases, healthy controls and epitopes to most vaccines
- crosses the bridge between infectious and autoimmune diseases
- ▶ **epitome-wide screening of antibody responses from serum against 29,128 epitopes of infectious diseases, autoantigens, vaccines and allergens**

PEPperCHIP® Virus Proteome Microarrays

- cover whole viral proteomes as overlapping peptides for proteome-wide epitope mappings e.g. for Zika virus, Dengue virus, West Nile fever, Influenza H1N1 and many more
- differentiation of similar pathogens by cross-reactivity screening and identification of unique epitopes
- ▶ **identification of unknown viral epitopes and novel biomarkers for viral infections**

Random Peptides for Serum Signature Discovery

- PEPperCHIP® Signature Microarrays with 5,500 linear random peptides
- PEPperCHIP® Signature Discovery Microarrays with 29,326 linear random peptides
- cyclic constrained random peptides on request
- ▶ **immune signature, mimotope, epitope and antigen discovery from serum samples**

High Resolution Epitope Mapping

- PEPperMAP® Linear Epitope Mapping with maximum peptide-peptide overlap
- PEPperMAP® Conformational Epitope Mapping with cyclic constrained peptides
- Epitope Substitution Scans for discovery of conserved and variable amino acids
- ▶ **infectious diseases epitope mapping and fingerprint analysis**