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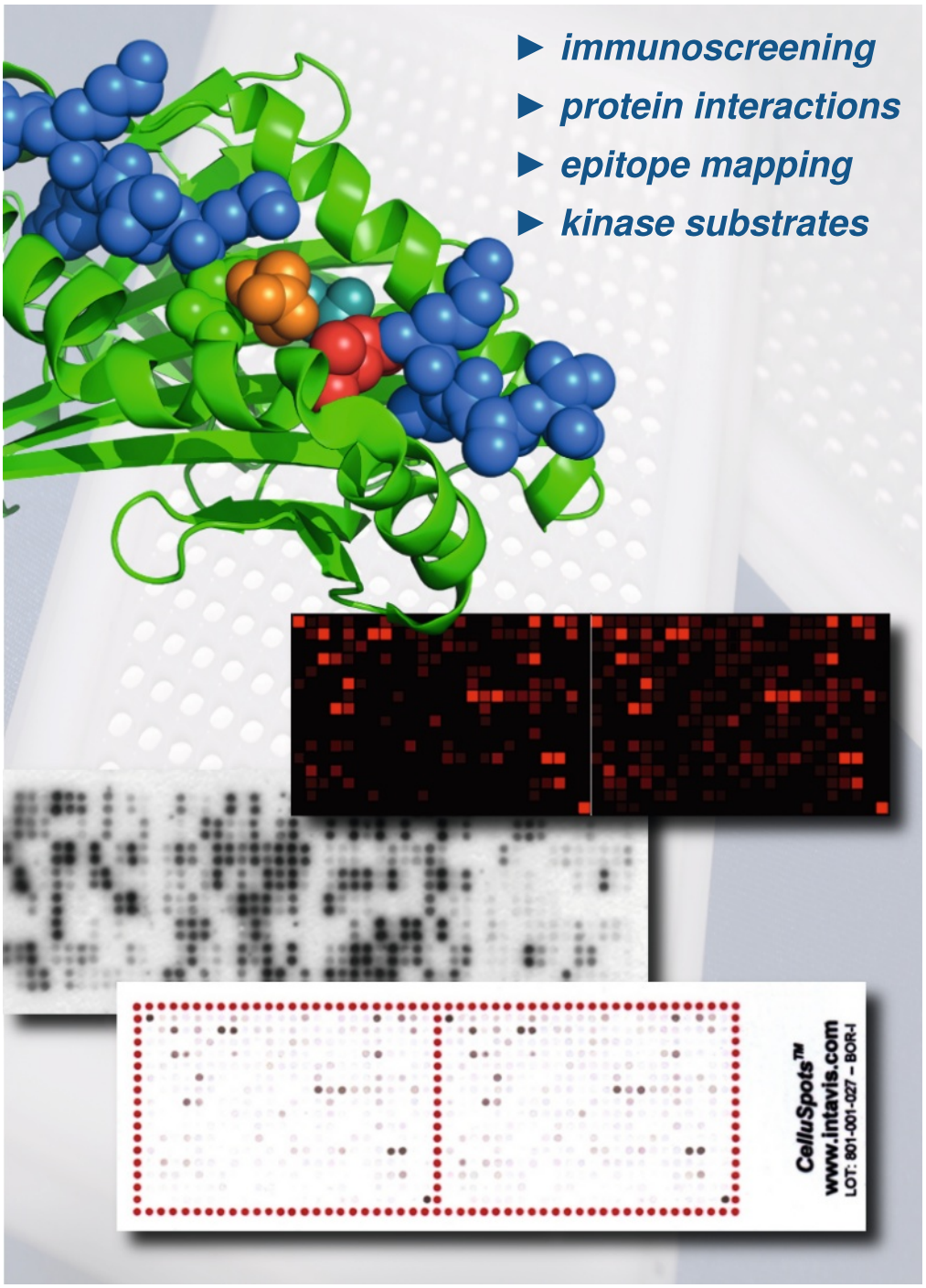
Peptide Services

CelluSpots™ Arrays

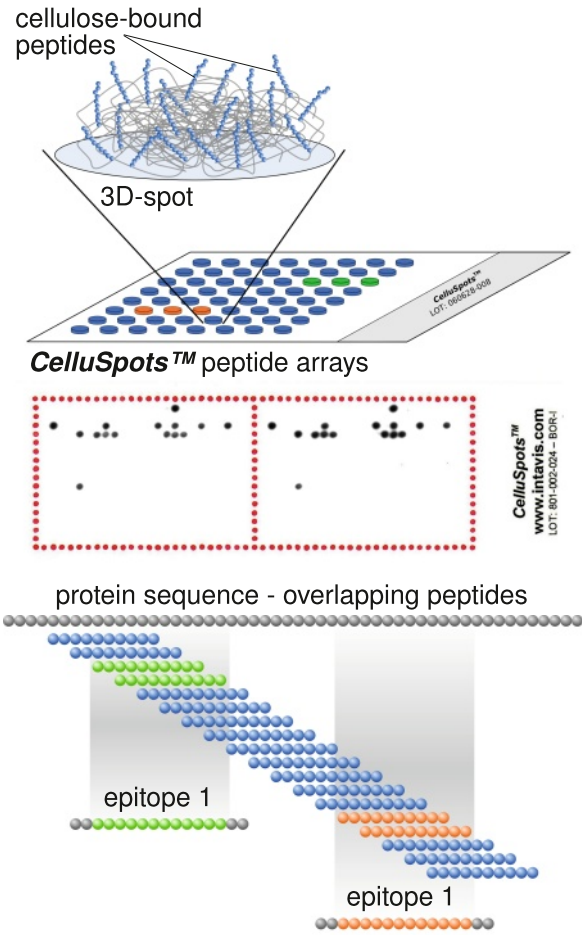
Custom and Pre-Configured Peptide Arrays



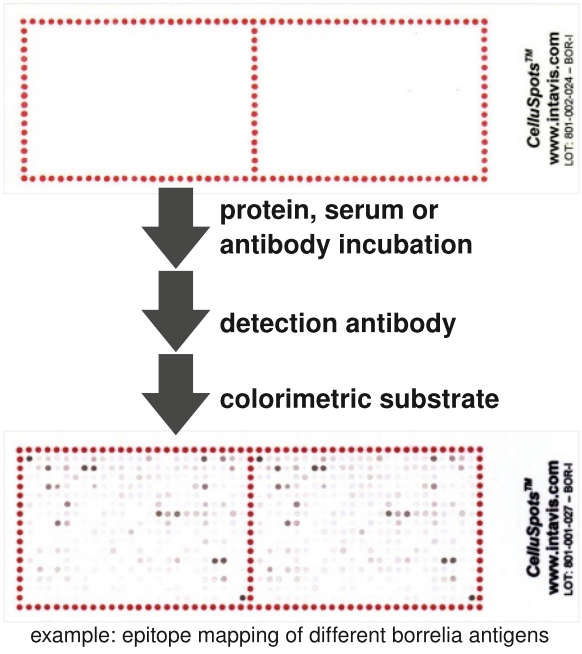
CelluSpots™ peptide arrays

CelluSpots™ peptide arrays are efficient tools to screen human sera, cell lysates, characterize antibodies, enzyme substrates (e.g. kinases) or sequence specificities of interaction partners with given peptide sequences (e.g. 14-3-3, SH3, PDZ, WW and other domains). A major advantage of this peptide array format is the ability to screen small volumes of different samples in parallel on many identical ***CelluSpots™*** arrays.
Numerous identical copies can be prepared, enabling large screening projects.

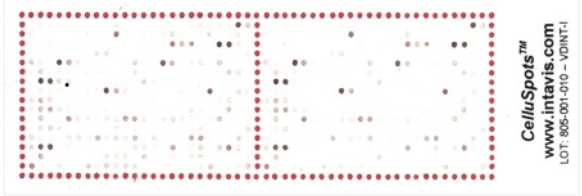
- peptide arrays on microscope slides
- high peptide loading due to 3D spots
- up to 1000 peptide spots per slide
- spot-to-spot distance of 1.2 mm



CelluSpots™ peptide array - 2x 384 peptide spots



example: epitope mapping of different borrelia antigens



example: epitope mapping of dengue and vaccinia antigens

Epitope mapping

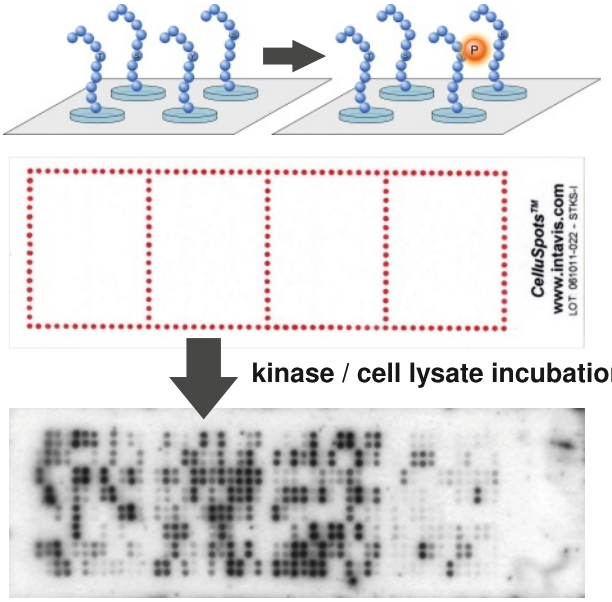
Overlapping peptides in the form of small scale soluble ***Peptide Libraries*** or ***CelluSpots™*** arrays on slides are inexpensive tools for fast parallel screening experiments. To determine the role of individual amino acids within the epitope, you can perform fine mapping with substitutional replacement sets. Results are then confirmed with purified individual peptides.

- antibody epitope mapping
- characterization of immune response
- identification of protein binding domains
- mapping of receptor-ligand interactions

Kinase substrate arrays

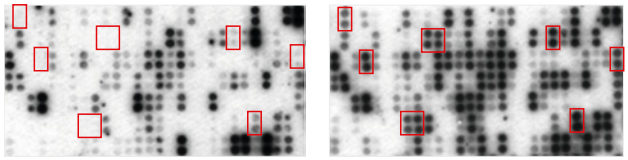
Many peptides are required to map the substrate specificity of kinases and other enzymes. ***CelluSpots™ kinase substrate arrays*** are economical tools that enable easy handling and low sample consumption per experiment. Three different ready to screen arrays with tyrosine- and serine/threonine-kinase substrates from annotated phosphorylation sites are available. The arrays can be used to characterize substrate specificities of kinases, for the comparison kinases, to identify autophosphorylation sites or to analyze kinase inhibitors.

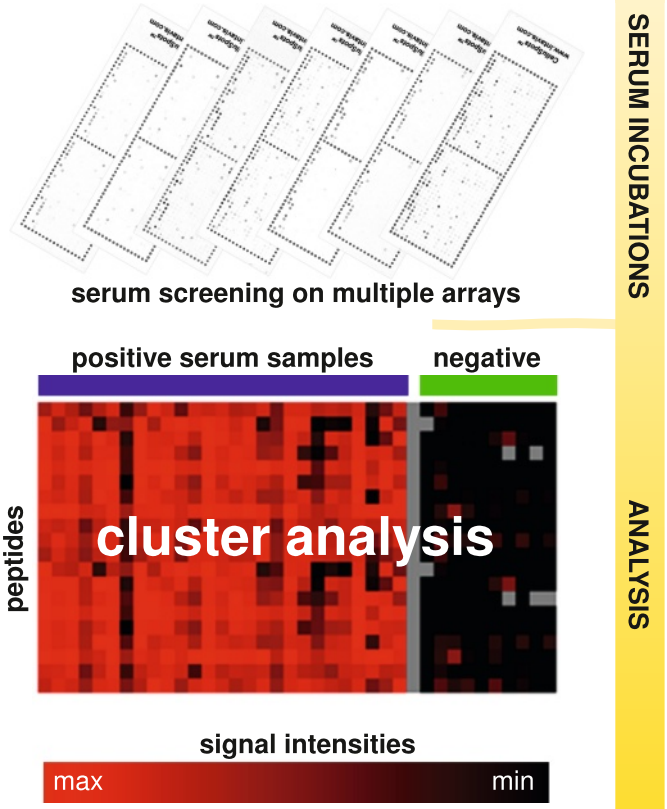
- peptide arrays with kinase substrates
- 3 different kinase substrate arrays:
  - Tyrosine kinase substrates I
  - Ser/Thr kinase substrates I and II
- 384 peptide-conjugates printed in duplicate spots on each slide



example: kinase incubation, autoradiographic detection

Comparison of kinases / cell lysates:





Immunoscreening

Sets of identical ***CelluSpots™*** arrays are efficient tools for screening of antibody epitopes in hundreds of serum samples.
A major advantage of ***CelluSpots™*** arrays is the ability to screen small volumes of samples. Epitope mapping with the supernatant of a monoclonal fusion is possible as well as monitoring the immune response of a small animal during the course of vaccination or infection. More concentrated serum samples can be used to study autoimmune diseases.

- hundreds identical arrays
- small sample volumes
- parallel screening
- various detection methods

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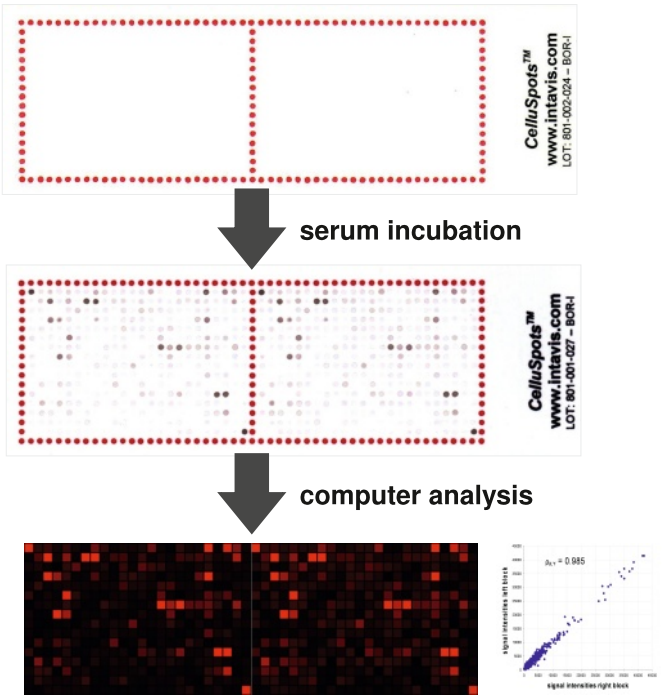
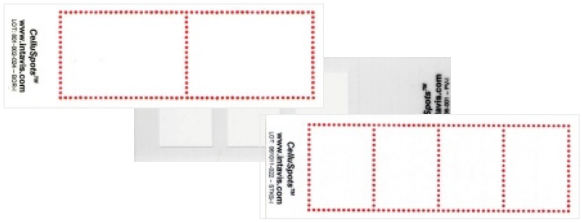


CelluSpots™ peptide arrays …

... are economic tools that can be adapted to special requirements of your research. We can help designing your peptide arrays from protein sequences to overlapping peptides with or without modifications.

- custom sequences
- modifications and unusual amino acids
- adapted array layouts



Specifications

- standard format is a standard microscope slide coated with inert white background foil
- spot-to-spot distance 1.2 mm; spot diameter approx. 0.8 mm
- peptides are covalently bound to cellulose via C-terminus
- arrays contain control peptides and red location marks
- detection methods: autoradiography, chemiluminescence, chromogenic substrate reactions and dedicated fluorescent dyes

Custom *CelluSpots™* Arrays:

- up to 384 peptide-cellulose-conjugate spots printed in duplicate on the foil side of the slide
- N-terminus is usually blocked (acetylation)

***CelluSpots™* Kinase Substrate Arrays:**

- 3 kinase substrate arrays are available:
  - Tyrosine Kinase Substrates I (YKS-I)
  - Serine/Threonine Kinase Substrates I (STKS-I)
  - Serine/Threonine Kinase Substrates II (STKS-II)
- 4x 96 peptide-cellulose-conjugate spots printed in duplicate on the foil side of the slides
- 15-mer peptides bound to cellulose via C-terminus and with acetylated N-terminus
- Tyr, Ser/Thr are at the 7th position of the peptides
- detailed sequence information are provided with each set of kinase substrate arrays

More information: Please contact us at peptides@intavis.com or visit www.intavispeptides.com

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