

PEPperCHIP® Allergen Epitope Microarray

The new PEPperCHIP® Allergen Epitope Microarray covers 4,022 linear allergen epitopes of the Immune Epitope Database (www.iedb.org), and enables the high-throughput screening of IgE antibody responses from serum and plasma.

Features:

The 4,022 different linear peptides of the PEPperCHIP® Allergen Epitope Microarray are based on 90 different allergens that correlate with **allergic diseases** of:

- the respiratory tract (e.g. allergic asthma, silicosis)
- skin and connective tissue (e.g. allergic contact dermatitis, dermatitis herpetiformis)
- the gastrointestinal tract

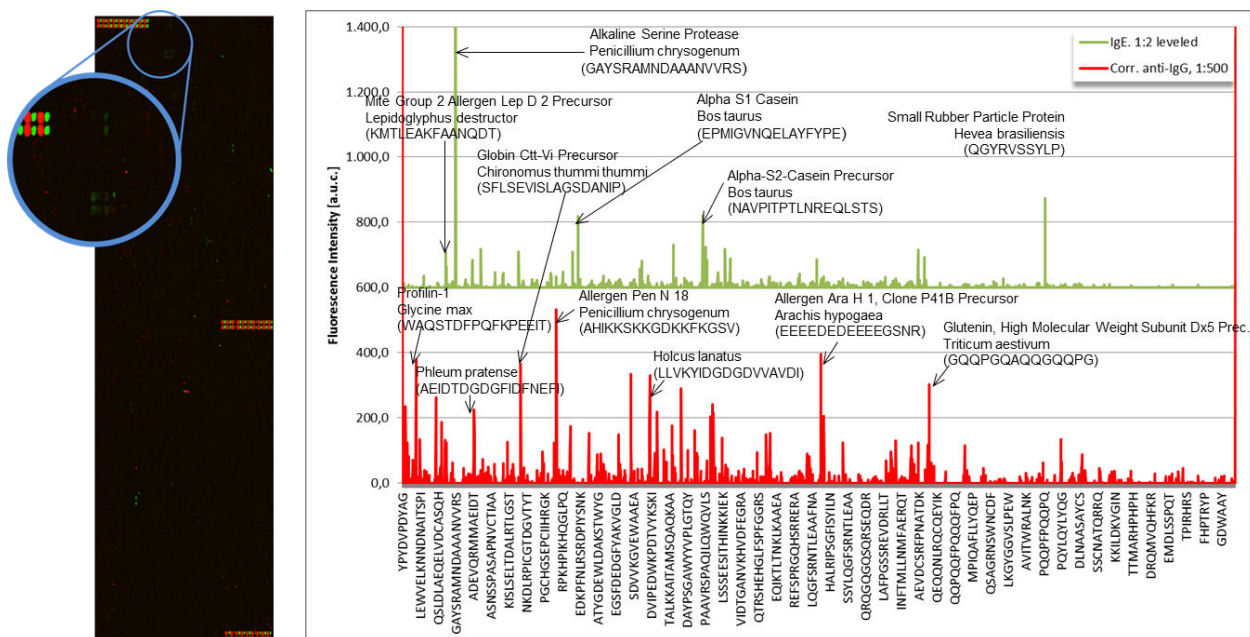
The PEPperCHIP® Allergen Epitope Microarray further covers various **triggers for**:

- food and milk hypersensitivity
- allergies to egg and peanuts
- penicillin allergy
- drug hypersensitivity
- many more

Applications:

The new PEPperCHIP® Allergen Epitope Microarray enables the multiplexed analysis of allergen specific IgE antibody responses in human sera for a variety of applications such as:

- the identification of unknown allergic diseases in patient sera
- a correlation of immediate hypersensitivity with IgE antibody profiles
- a comparison of IgE responses with e.g. IgG or IgA profiles
- the discrimination of multiple allergic diseases
- a cross-correlation of allergen specific IgE responses with pathogenesis



Analysis:

PEPperCHIP® Peptide Microarray analysis is straightforward and based on standard immunoassay protocols. PEPperPRINT also provides PEPperMAP® assay and analysis services.

Sample Need:

- 3 µl serum or 3 µg purified antibody for IgG mapping (corresponds to a sample dilution of 1:500)
- 300 µl serum or 300 µg purified antibody for IgE mapping (corresponds to a sample dilution of 1:5)

Advantages:

- largest allergen epitope library on a single chip
- equivalent to more than 4,000 peptide ELISAs at once
- scientific background information available for each epitope with references to literature
- enables comparison of IgE responses with e.g. IgA and IgG profiles
- low sample consumption compared to nitrocellulose-assays
- most economical solution for high throughput peptide screening
- outstanding signal-to-noise ratios due to proprietary slide coatings
- on request comprehensive support and analysis by PEPperPRINT's peptide microarray experts

Further Product Information:

- visit our website <http://www.pepperprint.com/products/pepperchipR-standard-microarrays/>

Related Products:

- PEPperCHIP® Infectious Disease Epitope Microarray
→ *3,760 linear B-cell epitopes associated with 196 different infectious diseases from the Immune Epitope Database*
- PEPperCHIP® Autoimmune Epitope Microarray 3.0
→ *4,287 linear B-cell epitopes associated with different autoimmune diseases from the Immune Epitope Database*
- PEPperCHIP® Human Epitome Microarray
→ *covers all linear human B-cell epitopes of the Immune Epitope Database: 29,128 linear B-cell epitopes based on 2,542 different proteins and 468 different organisms*
- PEPperCHIP® Custom Peptide Microarrays
→ *from 16 x 120 to 1 x 35,500 custom peptides per chip including linear and cyclic sequences*

For more information, please visit our website www.pepperprint.com or contact us by phone or email.