

PEPperCHIP® Lupus Microarray

Product: PEPperCHIP® Peptide Microarray

Microarray Content: 28 selected Lupus autoantigens translated into overlapping peptides for a multiplexed epitope mapping as well as additional 789 linear Lupus epitopes of the [Immune Epitope Database](#) including posttranslational modifications like citrulline and acetylysine.

Organisms:

Homo sapiens	Human herpesvirus 4 type 2
Artemia franciscana	Human immunodeficiency virus 1
Bos taurus	Human T-lymphotropic virus 1
Coxsackievirus A20	Macaca mulatta polyomavirus 1
Escherichia coli	Mus musculus
Gallus gallus	Mycobacterium tuberculosis
Human adenovirus 12	Paraburkholderia fungorum
Human alphaherpesvirus 2	Staphylococcus aureus
Human betaherpesvirus 5	Sus scrofa
Human Endogenous Retrovirus	Torque teno virus
Human gammaherpesvirus 4	Trypanosoma cruzi

Human Autoantigens:	UniProt ID	Protein Length
52-kD SS-A/Ro autoantigen	P19474	475 aa
Acidic ribosomal phosphoprotein P0	P05388	317 aa
Acidic ribosomal phosphoprotein P1	P05386	114 aa
Acidic ribosomal phosphoprotein P2	P05387	115 aa
Bence Jones protein HAG	AAB31507.1	117 aa
Epstein-Barr nuclear antigen 1	Q3KSS4	641 aa
Collagen VII	AAB24637.1	887 aa
High mobility group protein 17	AAB27051.1	89 aa
Heat shock protein HSP 90-beta	P08238	724 aa
Histone H3	AAA52651.1	135 aa
Lupus La protein	P05455	408 aa
Putative HTLV-1-related endogenous sequence (p25)	P13985	223 aa
Ribosomal protein P2	P05387	115 aa
Ro ribonucleoprotein	P10155	538 aa
Small nuclear ribonucleoprotein Sm D1	P62314	119 aa
Small nuclear ribonucleoprotein	P63162	240 aa
Trinucleotide repeat-containing gene 6A protein	Q8NDV7	1962 aa
U1 small nuclear ribonucleoprotein 70 kDa	P08621	437 aa
U1 small nuclear ribonucleoprotein A	P09012	282 aa

U1 small nuclear ribonucleoprotein C	P09234	159 aa
Histone H1.4	P10412	219 aa
Histone H2B type 1-K	O60814	126 aa
Histone H3.1t	Q16695	136 aa
Histone H4	P62805	103 aa
p70 Autoantigen	P12956	609 aa
T-cell receptor beta chain V region YT35	P01733	135 aa
Tumor necrosis factor receptor superfamily member 6	P25445	335 aa
Glucose-6-phosphate isomerase isoform 2	P06744	558 aa

All autoantigens and epitopes with a length of more than 20 amino acids were elongated by neutral GSGSGSG linkers to avoid truncated peptides. The elongated antigen and epitope sequences were translated into 15 aa peptides with a peptide-peptide overlap of 12 aa. Epitopes with a length of 16 - 19 aa were translated into 15 aa peptides with a peptide-peptide overlap of 14 aa; shorter epitopes were printed in full length. All peptides were printed in duplicate.

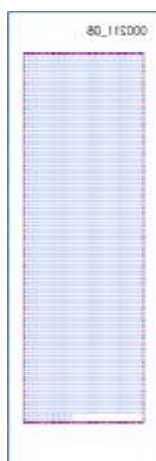
The PEPperCHIP® Lupus Microarray further contains citrullinated database epitopes including the corresponding arginine variants as well as peptides with acetyllysine including the corresponding lysine variants.

Epitope Lengths: 3 aa - 50 aa

Peptide Lengths: 3 aa - 15 aa

Number of Peptides/Spots: 5,062 / 10,124 (peptides printed in duplicate)

Microarray Layout:



Each PEPperCHIP® Peptide Microarray is marked with microarray ID on the backside of the glass slide. The glass slide is accurately placed in an incubation tray with the microarray surface up if the microarray ID appears in the top right corner in a mirror view manner.

The PEPperCHIP® Lupus Microarray is compatible with a 3/1-well PEPperCHIP® Incubation Tray.

Each PEPperCHIP® Lupus Microarray further contains HA, Polio and c-Myc control peptides (28, 32 and 22 spots each control).

Microarray Layout Files: Excel: Peptide_Map_Lupus_Microarray.xlsx

GenePix® Pro: Lupus_Microarray.gal

PepSlide® Analyzer: Lupus_Microarray.psf