

PEPperCHIP® Mycobacterium Tuberculosis Antigen Microarray

Product: PEPperCHIP® Peptide Microarray

Organism: Mycobacterium tuberculosis

Microarray Content: ESX-1 secretion-associated protein, espB (Rv3881c); Antigen 85-A, fbpA (Rv3804c); ESAT-6-like protein, esxB (Rv3874); Alanine and proline-rich secreted protein, apa (Rv1860); Lipoprotein, lprG (Rv1411c); Alpha-crystallin, hspX (Rv2031c); Phosphate-binding protein, pstS1 (Rv0934); ESX-1 secretion-associated protein, espA (Rv3616c); ESX-1 secretion-associated protein, espE (Rv3864); Immunogenic protein, mpt64 (Rv1980c); Enoyl-CoA hydratase, echA3 (Rv0632c); Probable cutinase, cfp21 (Rv1984c); Cell surface lipoprotein, mpt83 (Rv2873)

Protein	Uniprot Entry	Protein Length
ESX-1 secretion-associated protein, espB (Rv3881c)	P9WJD8	460 aa
Antigen 85-A, fbpA (Rv3804c)	P9WQP2	338 aa
ESAT-6-like protein, esxB (Rv3874)	P9WNK4	100 aa
Alanine and proline-rich secreted protein, apa (Rv1860)	P9WIR6	325 aa
Lipoprotein, lprG (Rv1411c)	P9WK44	236 aa
Alpha-crystallin, hspX (Rv2031c)	P9WMK0	144 aa
Phosphate-binding protein, pstS1 (Rv0934)	P9WGU0	374 aa
ESX-1 secretion-associated protein, espA (Rv3616c)	P9WJE0	392 aa
ESX-1 secretion-associated protein, espE (Rv3864)	P9WJD2	402 aa
Immunogenic protein, mpt64 (Rv1980c)	P9WIN8	228 aa
Enoyl-CoA hydratase, echA3 (Rv0632c)	P96907	231 aa
Probable cutinase, cfp21 (Rv1984c)	P9WP42	217 aa
Cell surface lipoprotein, mpt83 (Rv2873)	P9WNF2	220 aa

Sequence Compilation: The protein sequences were elongated by neutral GSGSGSG linkers to avoid truncated peptides. The elongated protein sequences were translated into 15 aa peptides printed in duplicate with a maximum peptide-peptide overlap of 14 aa for full epitope coverage.

- peptide length/overlap: 15 aa / 14 aa
- number of peptides/spots: 3,751 / 7,502

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.

PEPperCHIP® Mycobacterium Tuberculosis Antigen Microarray contains a single peptide array and is compatible with a 3/1-well PEPperCHIP® Incubation Tray.

Each PEPperCHIP® Mycobacterium Tuberculosis Antigen Microarray further contains Ha, Polio and c-Myc control peptides (37, 32 and 26 spots each control).

Microarray Layout Files:

Excel: Peptide_Map_MycobacteriumTuberculosis_Antigen_Microarray.xlsx

GenePix® Pro: Mycobacterium_Tuberculosis_Antigen_Microarray.gal

PepSlide® Analyzer: Mycobacterium_Tuberculosis_Antigen_Microarray.psf