Proteome-wide Analysis of *Coxiella burnetii* for Conserved T-cell epitopes with Presentation Across Multiple Host Species

Lindsay M.W. Piel1, Codie J. Durfee1, Stephen N. White1,2,3

1 USDA-ARS Animal Disease Research Unit, Pullman, WA 99164, USA

2 Department of Veterinary Microbiology & Pathology, Washington State University, Pullman, WA 99164, USA

3 Center for Reproductive Biology, Washington State University, Pullman, WA 99164, USA

Correspondence: Stephen.White@usda.gov

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| **Locus Tag (Gene Name)** | **Species** | **Epitopes Found** | **Experimental Process** | **Epitope**  **Type** | **Ref.** |
| **CBU\_00771** | Human | 203-LTLLLNWVNY-212 | Bioinformatic Screening with IFN-γ Recall Production | MHCI | (1) |
| **CBU\_00921**  **(*ybgF*)** | Murine | 185-LLTKKQYDKAQASFQ-199 | Immunologic Response in Immunized Mice | MHCII | (2) |
|  | Human |  | Serology against Protein Microarray | B-cell | (3) |
|  | Human | 196-ASFQNYLNDY-205 | Bioinformatic Screening with IFN-γ Recall Production | MHCI | (1) |
| **CBU\_01091\*** | Human |  | Serology against Protein Microarray | B-cell | (3) |
|  | Human | 247-SPAVLSAAKKIFGDGA-262  105-KTFVYPMGLY-114 | Bioinformatic Screening with IFN-γ Recall Production | MHCII/I | (1) |
| **CBU\_03071** | Murine | 146-GKLGVAYTYNRANAG-160 | Immunologic Response in Immunized Mice | MHCII | (2) |
|  | Human |  | Serology against Protein Microarray | B-cell | (4) |
|  | Human | 149-GVAYTYNRANAGLPTNK-165  202-VPGYRNASSKRFVAP-216 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
|  | Goat &  Human |  | Meta-analysis with Goat and Human Serology Testing | B-cell | (5) |
| **CBU\_03111** | Murine | 70-PVSASITQFGPVGEL-84 | Immunologic Response in Immunized Mice | MHCII | (2) |
|  | Murine |  | IFN-γ and Antibody Production | B-cell | (6) |
| **CBU\_05451**  **(*lemA*)** | Human |  | Serology against Protein Microarray | B-cell | (3, 4) |
| **CBU\_06121**  **(*ompH*)** | Human | 41-IKDINTRLEK-50  76-DEAVMGKKEAENLR-89  90-KEIQNDESTLRQQQQQ-105  123-SKVNGAVKRVAE-134 | Bioinformatic Analysis | MHCI/I/II/I | (7) |
|  | Murine | 13-VAMIWSVAAVAQTVG-27 | Immunologic Response in Immunized Mice | MHCII | (2) |
|  | Human |  | Serology against Protein Microarray | B-cell | (3, 4) |
| **CBU\_06301\***  **(*fkpA*)** | Murine | 159-FDSSYKRGQPATFPL-173 | Immunologic Response in Immunized Mice | MHCII | (2) |
|  | Murine |  | Protection from *C. burnetii* Infection using Antigen Stimulated BMDC | MHCII | (8) |
|  | Human |  | Serology against Protein Microarray | B-cell | (3) |
| **CBU\_07181** | Human | 21-VAKLRGDLSSIIHKL-35  28-LSSIIHKLTSFSKTEA-43 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
|  | Goat &  Human |  | Meta-analysis with Goat and Human Serology Testing | B-cell | (5) |
| **CBU\_07541** | Human |  | Serology against Protein Microarray | B-cell | (4) |
| **CBU\_08911** | Human |  | Serology against Protein Microarray | B-cell | (3, 4) |
|  | Goat &  Human |  | Meta-analysis with Goat and Human Serology Testing | B-cell | (5) |
| **CBU\_09681\*** | Human | 144-AENVLIIHNKTLAHRYLA-161 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
| **CBU\_11431**  **(*yajC*)** | Human |  | Serology against Protein Microarray | B-cell | (3, 4) |
|  | Human | 94-GTEITVQKASIASVLPK-110 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
| **CBU\_11571** | Murine | 88-PWRYIRSFPILASSG-102  133-LSLMLNYPNSADRYY-147  202-DLRYHAPIYGAVHPR-216 | IFN-γ and Antibody Production | MHCII&  B-cell | (6) |
|  | Human | 130-RFDLSLMLNYPNSADRY-146 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
| **CBU\_12601** | Human | 178-LPPVTSSVAVKVPSS-192 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
| **CBU\_18531\*** | Human |  | Serology against Protein Microarray | B-cell | (4) |
| **CBU\_18691** | Human |  | Serology against Protein Microarray | B-cell | (4) |
|  | Human | 200-GKHFDGIKVLKLSPQNTI-217 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
|  | Murine |  | IFN-γ and Antibody Production | B-cell | (6) |
| **CBU\_19101**  **(*com1*)** | Human | 59-QKKTEAQQEEHAQQAIKEN-77  121-VKQNKNLRV-129  214-QLAGTPTFVI-223 | Bioinformatic Analysis | MHCII/I/I | (7) |
|  | Murine | 42-HYLVNHPEVLVEASQ-56 | Immunologic Response in Immunized Mice | MHCII | (2) |
|  | Murine |  | Protection from *C. burnetii* Infection using Antigen Stimulated BMDC | MHCII | (8) |
|  | Murine | 42-HYLVNHPEVLVEASQ-56  80-KLFNDPASPVAGNPH-94 | IFN-γ and Antibody Production | MHCII &  B-cell | (6) |
|  | Human |  | Serology against Protein Microarray | B-cell | (3) |
|  | Human | 218-TPTFVIGNKALTKFGF-233  97-VTLVEFFDY-105  34-KDIQSIVHHY-43 | Bioinformatic Screening with IFN-γ Recall Production | MHCII/I/I | (1) |
| **CBU\_19431\***  **(*atpA*)** | Goat &  Human |  | Meta-analysis with Goat and Human Serology Testing | B-cell | (5) |
| **CBU\_19671** | Human |  | Serology against Protein Microarray | B-cell | (4) |
| **CBU\_20651** | Human |  | Serology against Protein Microarray | B-cell | (4) |
| **CBU\_02292\***  **(*rplL*)** | Human |  | Serology against Protein Microarray | B-cell | (3) |
|  | Human | 71-KIGVIKAIRTITGLGLKEA-89 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
| **CBU\_03832**  **(*tag*)** | Murine | 74-RDSFNNFDASIISKY-88 | IFN-γ and Antibody Production | MHCII&  B-cell | (6) |
|  | Goat &  Human |  | Meta-analysis with Goat and Human Serology Testing | B-cell | (5) |
| **CBU\_12002**  **(*icd*)** | Human | 139-LRPVRYFTGVPSPVKTPE-156 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
| **CBU\_13982\***  **(*sucB*)** | Human |  | Serology against Protein Microarray | B-cell | (3, 4) |
|  | Human | 231-RLGFMSFFTKAVVEALKRF-249  382-REAVLFLVTIKELLEDP-398 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
|  | Goat &  Human |  | Meta-analysis with Goat and Human Serology Testing | B-cell | (5) |
| **CBU\_14162** | Human | 74-IARYFMVNISQLIGEE-89 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
| **CBU\_15132\*** | Human |  | Serology against Protein Microarray | B-cell | (3) |
|  | Human | 137-QGHIINIGSISSHQV-151  208-EAVYKGFTPLKAEDIAEA-225 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
|  | Goat &  Human |  | Meta-analysis with Goat and Human Serology Testing | B-cell | (5) |
| **CBU\_16452**  **(dotB)** | Murine | 193-YDSLTTPTASVCQSE-207  269-RLVGSFPAEERIGRT-283 | IFN-γ and Antibody Production | MHCII &  B-cell | (6) |
| **CBU\_17062\*** | Goat &  Human |  | Meta-analysis with Goat and Human Serology Testing | B-cell | (5) |
| **CBU\_17162\***  **(gcvT)** | Human | 373-KIPVKIIKPPFVRRG-387 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
| **CBU\_17182\***  **(groEL)** | Murine | 474-DVNYGYNAATGEYGD-488 | Immunologic Response in Immunized Mice | MHCII | (2) |
|  | Goat &  Human |  | Meta-analysis with Goat and Human Serology Testing | B-cell | (5) |
| **CBU\_17192\***  **(groES)** | Human |  | Serology against Protein Microarray | B-cell | (3) |
| **CBU\_18352** | Human | 291-PDYVLNAVNHIRYKP-305  416-MMEHLQNITNLVSTGRQGA-434 | Bioinformatic Screening with IFN-γ Recall Production | MHCII | (1) |
| **CBU\_00083\*** | Murine |  | IFN-γ and Antibody Production | B-cell | (6) |

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