**Figure 1- Source data 1**

|  |
| --- |
| **A ) DR13 MS** |
| **Day** | **hCD45** |
| 7 (non-imm) | 7,13 | 9,05 | 13,40 | 9,74 | 11,80 | 6,32 | 12,00 | 6,27 |
| 13 (non-imm) | 30,30 | 42,80 | 19,40 | 39,00 | 40,70 | 37,00 | 43,10 | 45,00 |
| 42 (non-imm) | 46,30 | 35,90 | 42,80 |  |  |  |  |  |
| 42 spleen (non-imm) | 52,00 | 84,00 | 59,00 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 13 (non-imm) | 30,30 | 42,80 | 19,40 | 39,00 | 40,70 | 37,00 | 43,10 | 45,00 |
| 42 (Imm 2x200μg) | 2,70 | 20,80 | 6,12 | 18,40 | 4,23 |  |  |  |
| 42 spleen(Imm 2x200μg) | 44,70 | 64,70 | 32,70 | 22,90 | 41,90 |  |  |  |
|  | **mCD45** |
| 7 (non-imm) | 92,20 | 89,80 | 85,90 | 89,50 | 87,60 | 93,20 | 86,90 | 93,20 |
| 13 (non-imm) | 66,20 | 53,60 | 78,30 | 58,50 | 56,30 | 60,60 | 53,70 | 52,20 |
| 42 (non-imm) | 51,80 | 62,10 | 56,10 |  |  |  |  |  |
| 42 spleen (non-imm) | 46,90 | 12,40 | 39,60 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 13 (non-imm) | 66,20 | 53,60 | 78,30 | 58,50 | 56,30 | 60,60 | 53,70 | 52,20 |
| 42 (Imm 2x200μg) | 97,20 | 78,30 | 93,40 | 80,10 | 95,30 |  |  |  |
| 42 spleen(Imm 2x200μg) | 51,10 | 33,10 | 65,60 | 74,90 | 52,20 |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **DR15 HI** |  |  |  |  |  |  |  |  |  |
| **Day** | **hCD45** |
| 7 (non-imm) | 1,03 | 2,68 | 1,44 | 4,70 | 7,17 | 3,82 | 5,94 | 5,04 |
| 13 (non-imm) | 6,99 | 7,03 | 1,43 | 26,30 | 29,60 | 12,90 | 24,40 | 16,60 |
| 42 (non-imm) | 4,73 | 34,60 | 5,12 |  |  |  |  |  |
| 42 spleen (non-imm) | 31,60 | 54,60 | 26,60 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 13 (non-imm) | 6,99 | 7,03 | 1,43 | 26,30 | 29,60 | 12,90 | 24,40 | 16,60 |
| 42 (Imm 2x200μg) | 11,70 | 2,27 | 7,30 | 5,13 | 26,20 |  |  |  |
| 42 spleen(Imm 2x200μg) | 60,20 | 7,61 | 18,60 | 14,40 | 33,90 |  |  |  |
|  | **mCD45** |
| 7 (non-imm) | 98,90 | 96,90 | 98,20 | 94,80 | 91,30 | 95,40 | 93,60 | 94,50 |
| 13 (non-imm) | 92,30 | 92,80 | 98,10 | 71,60 | 68,20 | 85,50 | 66,90 | 81,20 |
| 42 (non-imm) | 94,00 | 62,10 | 93,40 |  |  |  |  |  |
| 42 spleen (non-imm) | 68,30 | 45,30 | 73,30 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 13 (non-imm) | 92,30 | 92,80 | 98,10 | 71,60 | 68,20 | 85,50 | 66,90 | 81,20 |
| 42 (Imm 2x200μg) | 87,60 | 97,30 | 92,10 | 94,50 | 73,20 |  |  |  |
| 42 spleen(Imm 2x200μg) | 39,60 | 90,20 | 78,30 | 85,00 | 65,40 |  |  |  |
| **DR15 MS1** |
| **Day** | **hCD45** |
| 7 (non-imm) | 1,69 | 1,08 | 2,07 | 2,91 | 3,78 | 0,68 |  |  |
| 13 (non-imm) | 24,20 | 26,90 | 27,90 | 21,40 | 31,30 | 42,40 | 4,76 |  |
| 42 (non-imm) | 31,80 | 34,90 | 37,40 |  |  |  |  |  |
| 42 spleen (non-imm) | 58,70 | 64,00 | 62,90 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 13 (non-imm) | 24,20 | 26,90 | 27,90 | 21,40 | 31,30 | 42,40 | 4,76 |  |
| 42 (Imm 2x200μg) | 12,30 | 21,60 | 14,40 | 12,50 | 17,50 |  |  |  |
| 42 spleen(Imm 2x200μg) | 45,40 | 39,00 | 20,40 | 40,00 | 35,20 |  |  |  |
|  | **mCD45** |
| 7 (non-imm) | 97,90 | 98,80 | 97,30 | 96,80 | 95,60 | 99,10 |  |  |
| 13 (non-imm) | 74,50 | 72,40 | 71,30 | 77,30 | 67,00 | 56,10 | 95,00 |  |
| 42 (non-imm) | 67,30 | 64,50 | 61,00 |  |  |  |  |  |
| 42 spleen (non-imm) | 41,20 | 35,90 | 37,00 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 13 (non-imm) | 74,50 | 72,40 | 71,30 | 77,30 | 67,00 | 56,10 | 95,00 |  |
| 42 (Imm 2x200μg) | 87,30 | 77,20 | 84,90 | 86,80 | 81,70 |  |  |  |
| 42 spleen(Imm 2x200μg) | 53,30 | 60,70 | 79,40 | 59,80 | 64,50 |  |  |  |
| **DR15 MS2** |
| **Day** | **hCD45** |
| 7 (non-imm) | 3,73 | 4,39 | 3,99 | 4,91 | 4,64 | 0,53 | 1,55 |  |
| 13 (non-imm) | 22,30 | 22,90 | 23,50 | 29,80 | 13,30 | 3,71 | 38,50 |  |
| 42 (non-imm) | 53,70 | 52,10 | 54,50 |  |  |  |  |  |
| 42 spleen (non-imm) | 66,00 | 48,10 | 66,70 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 13 (non-imm) | 22,30 | 22,90 | 23,50 | 29,80 | 13,30 | 3,71 | 38,50 |  |
| 42 (Imm 1x100μg) | 52,10 | 58,60 | 47,80 | 23,60 |  |  |  |  |
| 42 spleen(Imm 1x100μg) | 54,70 | 73,40 | 72,10 | 28,80 |  |  |  |  |
|  | **mCD45** |
| 7 (non-imm) | 96,10 | 95,50 | 95,90 | 94,9 | 95,20 | 99,40 | 98,2 |  |
| 13 (non-imm) | 77,30 | 76,50 | 76,10 | 69,6 | 86,50 | 96,10 | 61,0 |  |
| 42 (non-imm) | 45,50 | 46,90 | 44,40 |  |  |  |  |  |
| 42 spleen (non-imm) | 33,30 | 50,50 | 31,40 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 13 (non-imm) | 77,30 | 76,50 | 76,10 | 69,6 | 86,50 | 96,10 | 61,0 |  |
| 42 (Imm 1x100μg) | 45,00 | 39,30 | 51,20 | 75,7 |  |  |  |  |
| 42 spleen(Imm 1x100μg) | 44,70 | 26,00 | 26,50 | 70,8 |  |  |  |  |
| **B) DR13 MS** |
| **Day** | **CD4 T cells**  |
| 7 (non-imm) | 53,6 | 52,3 | 49,9 | 44,6 | 53,1 | 53,0 | 46,6 | 53,2 |
| 13 (non-imm) | 72,4 | 77,6 | 81,7 | 80,4 | 75,6 | 77,1 | 76,2 | 83,8 |
| 42 (non-imm) | 80,9 | 86,8 | 87,0 |  |  |  |  |  |
| 42 (imm 2x200μg) | 78,8 | 86,7 | 62,4 | 90,4 | 74,7 |  |  |  |
|  | **CD8 T cells** |
| 7 (non-imm) | 32,9 | 29,9 | 31,9 | 36,5 | 30,7 | 30,2 | 28,8 | 31,3 |
| 13 (non-imm) | 23,2 | 18,3 | 15,5 | 17,1 | 20,0 | 21,2 | 20,9 | 13,3 |
| 42 (non-imm) | 21,1 | 13,4 | 12,4 |  |  |  |  |  |
| 42 (imm 2x200μg) | 23,1 | 17,9 | 44,8 | 12,2 | 30,1 |  |  |  |
| **DR15 HI** |
| Day | **CD4 T cells** |
| 7 (non-imm) | 76,3 | 61,0 | 79,3 | 74,8 | 74,9 | 68,8 | 78,0 | 72,7 |
| 13 (non-imm) | 65,5 | 70,9 | 64,9 | 62,3 | 69,1 | 58,8 | 34,1 | 73,1 |
| 42 (non-imm) | 62,5 | 90,0 | 77,7 |  |  |  |  |  |
| 42 (imm 2x200μg) | 85,2 | 82,2 | 88,2 | 85,7 | 87,7 |  |  |  |
|  | **CD8 T cells** |
| 7 (non-imm) | 20,1 | 18,6 | 14,6 | 20,9 | 19,6 | 25,0 | 19,5 | 27,3 |
| 13 (non-imm) | 27,6 | 22,3 | 26,0 | 30,0 | 23,9 | 43,1 | 66,7 | 26,9 |
| 42 (non-imm) | 37,5 | 11,0 | 23,2 |  |  |  |  |  |
| 42 (imm 2x200μg) | 16,0 | 17,8 | 15,8 | 18,1 | 14,5 |  |  |  |
| **DR15 MS1** |
| **Day** | **CD4 T cells** |
| 7 (non-imm) | 73,5 | 62,1 | 81,8 | 63,3 | 47,1 | 58,1 |  |  |
| 13 (non-imm) | 48,4 | 59,3 | 54,6 | 67,5 | 53,9 | 50,1 | 66,3 |  |
| 42 (non-imm) | 54,2 | 68,4 | 62,9 |  |  |  |  |  |
| 42 (imm 2x200μg) | 70,4 | 73,9 | 63,7 | 53,3 | 76,1 |  |  |  |
|  | **CD8 T cells** |
| 7 (non-imm) | 24,5 | 34,5 | 18,2 | 26,7 | 41,2 | 35,5 |  |  |
| 13 (non-imm) | 53,3 | 43,8 | 46,6 | 32,5 | 46,4 | 50,7 | 35,1 |  |
| 42 (non-imm) | 46,6 | 35,2 | 40,3 |  |  |  |  |  |
| 42 (imm 2x200μg) | 29,2 | 28,8 | 35,0 | 43,1 | 27,7 |  |  |  |
| **DR15 MS2** |
| Day | **CD4 T cells** |
| 7 (non-imm) | 61,5 | 64,2 | 65,2 | 68,8 | 72,8 | 54,5 | 59,7 |  |
| 13 (non-imm) | 67,1 | 64,0 | 65,6 | 53,8 | 78,5 | 62,9 | 68,9 |  |
| 42 (non-imm) | 91,7 | 73,2 | 53,4 |  |  |  |  |  |
| 42 (imm 1x100μg) | 91,9 | 93,0 | 85,8 | 74,7 |  |  |  |  |
|  | **CD8 T cells** |
| 7 (non-imm) | 32,30 | 28,00 | 26,9 | 25,7 | 22,1 | 38,6 | 34,1 |  |
| 13 (non-imm) | 27,30 | 29,40 | 28,5 | 41,0 | 18,3 | 33,0 | 27,1 |  |
| 42 (non-imm) | 6,65 | 24,90 | 44,6 |  |  |  |  |  |
| 42 (imm 1x100μg) | 6,11 | 4,63 | 10,4 | 19,6 |  |  |  |  |
| **C) Spleen dpt42**  |
| **DR13 MS** | **CD4 T cells** |
| non-imm | 43,80 | 53,10 | 54,70 |  |  |  |  |  |  |
| imm 2x200μg | 35,20 | 43,60 | 40,50 | 60,70 | 45,10 |  |  |  |  |
|  | **CD8 T cells** |
| non-imm | 23,00 | 6,88 | 17,50 |  |  |  |  |  |  |
| imm 2x200μg | 11,00 | 10,30 | 21,80 | 8,46 | 15,90 |  |  |  |  |
|  | **CD19 T cells** |
| non-imm | 27,40 | 34,60 | 23,40 |  |  |  |  |  |  |
| imm 2x200μg | 47,00 | 41,30 | 30,30 | 23,10 | 34,00 |  |  |  |  |
| **DR15 HI** | **CD4 T cells** |
| non-imm | 57,00 | 75,50 | 60,60 |  |  |  |  |  |
| imm 2x200μg | 67,80 | 78,30 | 64,30 | 72,400 | 80,40 |  |  |  |
|  | **CD8 T cells** |
| non-imm | 34,30 | 11,00 | 27,90 |  |  |  |  |  |
| imm 2x200μg | 17,20 | 18,70 | 25,20 | 24,30 | 16,80 |  |  |  |
|  | **CD19 T cells** |
| non-imm | 2,49 | 2,93 | 2,42 |  |  |  |  |  |
| imm 2x200μg | 2,59 | 1,05 | 9,21 | 2,80 | 0,51 |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **DR15 MS1** | **CD4 T cells** |
| non-imm | 45,80 | 42,00 | 49,40 |  |  |  |  |  |
| imm 2x200μg | 63,60 | 57,00 | 52,90 | 41,50 | 62,40 |  |  |  |
|  | **CD8 T cells** |
| non-imm | 49,80 | 43,70 | 41,30 |  |  |  |  |  |
| imm 2x200μg | 33,10 | 36,90 | 38,90 | 54,30 | 33,30 |  |  |  |
|  | **CD19 T cells** |
| non-imm | 0,54 | 2,99 | 1,810 |  |  |  |  |  |
| imm 2x200μg | 0,67 | 2,03 | 1,94 | 1,29 | 2,34 |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **DR15 MS2** | **CD4 T cells** |
| non-imm | 82,40 | 55,80 | 40,70 |  |  |  |  |  |
| imm 1x100μg | 88,20 | 85,50 | 73,40 | 61,70 |  |  |  |  |
|  | **CD8 T cells** |
| non-imm | 9,02 | 39,90 | 48,40 |  |  |  |  |  |
| imm 1x100μg | 8,13 | 7,71 | 12,90 | 33,10 |  |  |  |  |
|  | **CD19 T cells** |
| non-imm | 7,21 | 1,12 | 0,077 |  |  |  |  |  |
| imm 1x100μg | 1,71 | 5,75 | 8,78 | 0,36 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **DR15 MS3** | **CD4 T cells** |
| non-imm | 64,10 | 65,70 | 59,80 |  |  |  |  |  |
| imm 1x100μg | 81,60 | 89,40 | 76,50 | 86,00 |  |  |  |  |
|  | **CD8 T cells** |
| non-imm | 11,80 | 29,20 | 12,50 |  |  |  |  |  |
| imm 1x100μg | 10,70 | 4,22 | 15,20 | 9,32 |  |  |  |  |
|  | **CD19 T cells** |
| non-imm | 22,20 | 2,37 | 21,10 |  |  |  |  |  |
| imm 1x100μg | 5,44 | 4,71 | 4,36 | 1,49 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **DR15 MS4** | **CD4 T cells** |
| non-imm | 65,90 | 81,00 | 59,80 |  |  |  |  |  |
| imm 1x100μg | 92,10 | 62,90 | 78,90 | 77,40 |  |  |  |  |
|  | **CD8 T cells** |
| non-imm | 26,10 | 13,90 | 29,400 |  |  |  |  |  |
| imm 1x100μg | 6,79 | 27,80 | 16,500 | 15,70 |  |  |  |  |
|  | **CD19 T cells** |
| non-imm | 0,39 | 0,30 | 3,07 |  |  |  |  |  |
| imm 1x100μg | 0,40 | 4,49 | 0,36 | 0,20 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **DR15 MS5** | **CD4 T cells** |
| non-imm | 74,00 | 75,40 | 63,60 |  |  |  |  |  |
| imm 1x100μg | 68,20 | 70,90 | 77,90 | 64,700 |  |  |  |  |
|  | **CD8 T cells** |
| non-imm | 16,30 | 15,60 | 30,90 |  |  |  |  |  |
| imm 1x100μg | 25,40 | 18,10 | 14,00 | 32,60 |  |  |  |  |
|  | **CD19 T cells** |
| non-imm | 7,87 | 7,55 | 4,72 |  |  |  |  |  |
| imm 1x100μg | 4,38 | 7,74 | 6,99 | 1,41 |  |  |  |  |
| **D) Splenocytes dpt 42** |
| **DR13 MS** | **CD4+IFN-γ+** |
| non-imm | 48,6 | 42,8 |  |  |  |  |  |  |
| imm 2x200μg | 38,7 | 55,7 | 55,1 | 61,5 | 51,5 |  |  |  |
|  | **CD8+IFN-γ+** |
| non-imm | 82,7 | 78,0 |  |  |  |  |  |  |
| imm 2x200μg | 62,6 | 82,7 | 84,4 | 82,1 | 82,2 |  |  |  |
|  | **CD4+IL-17A+** |
| non-imm | 1,11 | 0,62 |  |  |  |  |  |  |
| imm 2x200μg | 0,72 | 1,07 | 2,20 | 2,64 | 2,64 |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **DR15 HI** | **CD4+IFN-γ+** |
| non-imm | 42,5 | 41,6 | 47,5 |  |  |  |  |  |
|  | **CD8+IFN-γ+** |
| non-imm | 80,5 |  |  |  |  |  |  |  |
|  | **CD4+IL-17A+** |
| non-imm | 0,57 | 0,93 | 2,08 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **DR15 MS1** | **CD4+IFN-γ+** |
| non-imm | 33,0 | 42,6 | 29,5 |  |  |  |  |  |
| imm 2x200μg | 36,2 | 42,0 | 43,4 | 38,5 | 44,3 |  |  |  |
|  | **CD8+IFN-γ+** |
| non-imm | 79,2 | 67,6 | 66,1 |  |  |  |  |  |
| imm 2x200μg | 54,2 | 60,7 | 63,8 | 66,7 | 63,3 |  |  |  |
|  | **CD4+IL-17A+** |
| non-imm | 0,92 | 1,49 | 2,23 |  |  |  |  |  |
| imm 2x200μg | 1,09 | 1,39 | 1,15 | 0,72 | 2,48 |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **DR15 MS2** | **CD4+IFN-γ+** |
| non-imm | 4,84 | 7,52 | 5,02 |  |  |  |  |  |
| imm 1x100μg | 6,4 | 5,96 | 12,3 | 13,2 |  |  |  |  |
|  | **CD4-IFN-γ+** |
| non-imm | 37,40 | 48,20 | 63,30 |  |  |  |  |  |
| imm 1x100μg | 46,6 | 39,30 | 55,4 | 63,9 |  |  |  |  |
|  | **CD4+IL-17A+** |
| non-imm | 2,07 | 0,71 | 0,240 |  |  |  |  |  |
| imm 1x100μg | 1,07 | 1,33 | 4,10 | 1,15 |  |  |  |  |
|  | **CD4-IL-17A+** |
| non-imm | 1,05 | 0,38 | 0,057 |  |  |  |  |  |
| imm 1x100μg | 0,54 | 0,61 | 3,88 | 0,23 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **DR15 MS3** | **CD4+IFN-γ+** |
| non-imm | 11,8 | 9,02 | 8,54 |  |  |  |  |  |
| imm 1x100μg | 6,43 | 6,26 | 9,28 | 11,2 |  |  |  |  |
|  | **CD4-IFN-γ+** |
| non-imm | 40,7 | 46,30 | 33,80 |  |  |  |  |  |
| imm 1x100μg | 40,50 | 20,30 | 44,90 | 42,1 |  |  |  |  |
|  | **CD4+IL-17A+** |
| non-imm | 2,42 | 2,53 | 3,29 |  |  |  |  |  |
| imm 1x100μg | 4,27 | 4,70 | 3,27 | 2,68 |  |  |  |  |
|  | **CD4-IL-17A+** |
| non-imm | 1,80 | 1,06 | 2,80 |  |  |  |  |  |
| imm 1x100μg | 3,17 | 1,75 | 1,74 | 0,67 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **DR15 MS5** | **CD4+IFN-γ+** |
| non-imm | 7,83 | 6,72 | 9,79 |  |  |  |  |  |
| imm 1x100μg | 6,11 | 9,52 | 4,12 | 3,15 |  |  |  |  |
|  | **CD4-IFN-γ+** |
| non-imm | 31,10 | 33,60 | 39,40 |  |  |  |  |  |
| imm 1x100μg | 22,40 | 28,30 | 25,50 | 23,20 |  |  |  |  |
|  | **CD4+IL-17A+** |
| non-imm | 2,87 | 2,58 | 2,22 |  |  |  |  |  |
| imm 1x100μg | 4,79 | 4,32 | 2,55 | 1,14 |  |  |  |  |
|  | **CD4-IL-17A+** |
| non-imm | 2,02 | 2,44 | 1,62 |  |  |  |  |  |
| imm 1x100μg | 3,57 | 3,99 | 2,73 | 0,76 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 1. **DR13 MS Cell division index**
 |
|  | non-imm |  |  |  |  |  |  |  |
| mMOG35-55 | 1,114393 | 1,432471 | 0,817296 |  |  |  |  |  |
| hMOG35-55 | 1,285637 | 1,574168 | 0,789472 |  |  |  |  |  |
| MOG1-20 | 1,433565 | 1,568586 | 0,907848 |  |  |  |  |  |
| MBP83-99 | 1,449921 | 1,495482 | 1,004507 |  |  |  |  |  |
| anti-CD3 | 1,530000 | 1,577814 | 0,983139 |  |  |  |  |  |
| US | 1,000000 | 1,000000 | 1,000000 |  |  |  |  |  |
|  | imm 2x200μg |  |  |  |  |  |  |  |
| mMOG35-55 | 3,291701 | 2,614570 | 2,089191 | 1,520347 |  |  |  |  |
| hMOG35-55 | 4,245683 | 2,897676 | 2,310165 |  |  |  |  |  |
| MOG1-20 | 3,672333 | 2,858430 | 1,316359 | 1,751039 |  |  |  |  |
| MBP83-99 | 3,872877 | 3,554057 | 1,499571 | 1,931515 |  |  |  |  |
| anti-CD3 | 4,623396 | 3,362379 | 2,180264 |  |  |  |  |  |
| US | 1,000000 | 1,000000 | 1,000000 | 1,000000 |  |  |  |  |