

**Table S2.** The cell enrichment of SLE implicated genes within 533 cell types expression matrix in Homo sapiens. *The cells filled in yellow mean passing the Bonferroni-corrected significance criteria ( $P \leq 9.38 \times 10^{-5}$ ).*

| Cell   | Eastern Asian | Caucasian | Caucasian without HLA region |
|--|---------------|-----------|------------------------------|
| Burkitt's lymphoma cell line:DAUDI.CNhs10739.10422-106C8 | 8.55E-05      | 6.67E-03  | 6.82E-03                     |
| CD14+ Monocytes  | 7.33E-05      | 2.74E-04  | 1.27E-04                     |
| CD14+ monocytes - treated with BCG                       | 4.76E-05      | 2.05E-03  | 1.14E-03                     |
| CD14+ monocytes - treated with Group A streptococci      | 2.30E-05      | 2.00E-05  | 9.77E-05                     |
| CD14+ monocytes - treated with IFN + N-hexane            | 8.55E-05      | 4.20E-04  | 2.64E-04                     |
| CD14+ monocytes - treated with Salmonella                | 1.00E-06      | 1.00E-06  | 1.00E-06                     |
| CD14+ monocytes - treated with lipopolysaccharide        | 6.00E-06      | 9.00E-06  | 7.00E-06                     |
| CD19+ B Cells  | 1.00E-06      | 2.00E-06  | 1.00E-06                     |
| CD19+ B Cells (pluriselect)                              | 3.00E-06      | 2.00E-05  | 2.30E-05                     |
| CD4+ T Cells   | 8.79E-05      | 3.31E-03  | 2.76E-03                     |
| CD4+CD25+CD45RA- memory regulatory T cells               | 2.20E-05      | 3.42E-04  | 7.83E-04                     |
| CD4+CD25+CD45RA- memory regulatory T cells expanded      | 8.55E-05      | 5.08E-03  | 8.71E-03                     |
| CD4+CD25-CD45RA- memory conventional T cells             | 5.00E-06      | 2.20E-02  | 1.10E-02                     |
| Dendritic Cells - plasmacytoid                           | 9.00E-06      | 5.00E-06  | 2.00E-06                     |
| Eosinophils  | 1.06E-03      | 1.20E-05  | 1.60E-05                     |
| Natural Killer Cells                                     | 3.42E-05      | 1.10E-04  | 1.42E-04                     |
| Neutrophils  | 1.55E-02      | 2.00E-06  | 3.00E-06                     |
| Peripheral Blood Mononuclear Cells                       | 2.00E-06      | 1.61E-04  | 6.10E-05                     |
| b cell line:RPMI1788.CNhs10744.10427-106D4               | 1.00E-06      | 1.81E-04  | 3.42E-04                     |
| blood  | 7.57E-05      | 1.25E-03  | 9.39E-04                     |
| diffuse large B-cell lymphoma cell                       | 1.10E-05      | 6.67E-03  | 7.30E-03                     |

|  |          |          |          |
|--|----------|----------|----------|
| line:CTB-1.CNhs11741.10631-108I1                               |          |          |          |
| migratory langerhans cells                                     | 2.20E-05 | 1.71E-04 | 1.32E-04 |
| Plasma cell leukemia cell line:ARH-77.CNhs12807.10840-111E3    | 2.00E-06 | 1.00E-06 | 1.00E-06 |
| lymph node   | 3.42E-05 | 1.03E-02 | 9.20E-03 |
| lymphoma   | 8.79E-05 | 1.15E-04 | 2.74E-04 |
| onsil  | 3.54E-05 | 3.62E-04 | 3.52E-04 |
| splenic lymphoma with villous lymphocytes cell                 |          |          |          |
| line:SLVL.CNhs10741.10424-106D1                                | 4.27E-05 | 5.48E-04 | 3.42E-04 |
| xeroderma pigmentosum b cell line:XPL 17.CNhs11813.10563-108A5 | 1.00E-06 | 1.00E-06 | 1.00E-06 |
| mycosis fungoides  | 6.00E-06 | 2.10E-04 | 6.26E-04 |

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