

Supplementary Table S11. GWAS loci for SLE which are methylation quantitative trait loci (meQTLs) for differentially methylated CpG sites (DMCs) in SLE.

| Chr | SNP position hg18 | GWAS SNP | Proxy SNP | r ² | GWAS gene | DMC CpG | CpG position hg18 | CpG gene | SLE meQTL p Value* | Control meQTL p Value* |
|-----|-------------------|------------|------------|----------------|----------------------|------------|-------------------|-------------------|--------------------|------------------------|
| 1 | 196861722 | rs34889541 | rs16843520 | 1 | <i>PTPRC (CD45)</i> | cg07504763 | 196841700 | <i>intergenic</i> | 2.05E-09 | 0.18 |
| 6 | 32000463 | rs1270942 | rs497309 | 1 | <i>MHC-class III</i> | cg16656520 | 31908864 | <i>intergenic</i> | 9.69E-10 | 3.48E-04 |
| 6 | 34905219 | rs9462027 | - | - | <i>UHRF1BP1</i> | cg07306190 | 34868850 | <i>UHRF1BP1</i> | 1.37E-19 | 4.18E-24 |
| 7 | 128361203 | rs4728142 | - | - | <i>IRF5</i> | cg04864179 | 128367200 | <i>IRF5</i> | 1.23E-04 | 4.90E-19 |
| 11 | 556936 | rs12802200 | - | - | <i>IRF7</i> | cg00645579 | 607140 | <i>IRF7</i> | 1.60E-08 | 1.75E-24 |
| 17 | 35174720 | rs2941509 | - | - | <i>IKZF3</i> | cg14263391 | 35147540 | <i>GRB7</i> | 4.06E-06 | 9.97E-10 |
| 22 | 20306934 | rs7444 | - | - | <i>UBE2L3</i> | cg06850285 | 20251269 | <i>UBE2L3</i> | 1.40E-10 | 2.23E-14 |

*A p-value <6.5×10⁻⁹ was considered significant after multiple testing correction (Bonferroni).