**Table e-1 Cell phenotyping descriptions for Epiontis epigenetic cell counting of leukocyte subsets in frozen whole blood**

|  |  |
| --- | --- |
| Leukocyte Subset | Epigenetic Assay |
| B cells | The epigenetic BLC assay (qPCR25) is based on the on the LDL receptor related protein 5 (LRP5) gene. |
| T cells | The epigenetic CD3 assay (qPCR2) is based on the intergenic region of the CD3D/CD3G gene (encoding for the CD3D and CD3G molecule of the CD3-TCR complex). |
| CD8+ cytotoxic T cells | The epigenetic CD8 assay (qPCR19-2) is based on the CD8B gene, which encodes for the CD8 beta chain isoforms of the CD8 antigen. |
| CD4+ T helper cells | The epigenetic CD4 assay (qPCR12-2) is based on the CD4 gene (cluster of differentiation 4), which encodes a membrane glycoprotein of T lymphocytes. |
| Regulatory T cells | The epigenetic Treg assay (qPCR1) is based on the TSDR (Treg-specific demethylated region) of the FOXP3 gene. |
| Th17 cells | The epigenetic Th17 assay (qPCR14/qPCR14-2) is based on IL17A gene (Interleukin 17A), which encodes for a proinflammatory cytokine produced by activated T cells. |
| Naive CD8+ T cells | The epigenetic nCD8 assay (qPCR16-2) is based on the CD248 gene, a protein coding gene.  |
| PD1 cells | The epigenetic PD1 assay (qPCR30) is based on the PDCD1 gene (Programmed Cell Death 1), which encodes a cell surface membrane protein of the immunoglobulin superfamily that inter alia is presented on follicular T helper cells. |