Whole blood peripheral blood leukocyte immunophenotyping SLM_PBI_001

Purpose

Whole blood peripheral blood leukocyte immunophenotyping

Procedure

Peripheral blood leukocyte assay is performed at 6 weeks of age (Mice were fed on Mouse Breeder Diet (5021, Labdiet) from weaning)

Non-fasted unanaesthetised mice are restrained and blood is collected into EDTA coated tubes via the tail.

Whole blood is stained with a titrated cocktail of antibodies including CD45, TCRab, TCRgd, CD161, CD4, CD8, CD19, CD25, CD44 and CD62L.

Samples are fixed and red blood cells lysed prior to acquisition on a BD LSR II flow cytometer after running automated compensation using compbeads and BD FACSDiva software.

Data is analysed using FlowJo after singlet doublet discrimination, a time gate is used to exclude HTS issues and leukocytes identified with a SSC and CD45 gate. Total T cells, alpha beta T cells, $CD4^+$ alpha beta T cells, $CD8^+$ alpha beta T cells, gamma delta T cells, NKT cells, NK cells and B cells are reported as percentage of leukocytes. $CD4^+$ $CD25^+$ regulatory alpha beta T cells, $CD4^+$ $CD44^{hi}$ $CD62L^{lo}$ alpha beta T cells and $CD8^+$ $CD44^{hi}$ $CD62L^{lo}$ alpha beta T cells are reported as percentage of parent. Using the white blood cell count obtained from the haematology analysis absolute cell counts are derived for each population and reported as cells/ul.

Parameters and Metadata

Total T cell percentage SLM_PBI_001_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: %

Description: total_t_cell_percentage

Alpha beta T cell percentage SLM_PBI_002_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: %

Description: alpha_beta_t_cell_percentage

CD4+ alpha beta T cell percentage SLM_PBI_003_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: %

Description: cd4_alpha_beta_t_cell_percentage

CD8+ alpha beta T cell percentage SLM_PBI_004_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: %

Description: cd8_alpha_beta_t_cell_percentage

Gamma delta T cell percentage SLM_PBI_005_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: %

Description: gamma_delta_t_cell_percentage

NKT cell percentage SLM_PBI_006_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: %

Description: nkt_cell_percentage

NK cell percentage SLM_PBI_007_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: %

Description: nk_cell_percentage

B cell percentage SLM_PBI_008_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: %

Description: b_cell_percentage

CD4+ CD25+ alpha beta regulatory T cell percentage SLM_PBI_009_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: %

Description: cd4_cd25_alpha_beta_regulatory_t_cell_percentage

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CD4+ CD44+ CD62L- alpha beta effector T cell percentage

SLM_PBI_010_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: %

Description: cd4_cd44_cd62l_alpha_beta_effector_t_cell_percentage

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CD8+ CD44+ CD62L- alpha beta effector T cell percentage

SLM_PBI_011_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: %

Description: cd8_cd44_cd62l_alpha_beta_effector_t_cell_percentage

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Total T cell number SLM_PBI_012_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: cells/ul

Description: total_t_cell_number

Alpha beta T cell number SLM_PBI_013_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: cells/ul

Description: alpha_beta_t_cell_number

CD4+ alpha beta T cell number SLM_PBI_014_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: cells/ul

Description: cd4_alpha_beta_t_cell_number

CD8+ alpha beta T cell number SLM_PBI_015_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: cells/ul

Description: cd8_alpha_beta_t_cell_number

Gamma delta T cell number SLM_PBI_016_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: cells/ul

Description: gamma_delta_t_cell_number

NKT cell number SLM_PBI_017_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: cells/ul

Description: nkt_cell_number

NK cell number SLM_PBI_018_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: cells/ul

Description: nk_cell_number

B cell number SLM_PBI_019_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: cells/ul

Description: b_cell_number

CD4+ CD25+ alpha beta regulatory T cell number SLM_PBI_020_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: cells/ul

Description: cd4_cd25_alpha_beta_regulatory_t_cell_number

CD4+ CD44+ CD62L- alpha beta effector T cell number SLM_PBI_021_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: cells/ul

Description: cd4_cd44_cd62l_alpha_beta_effector_t_cell_number

CD8+ CD44+ CD62L- alpha beta effector T cell number SLM_PBI_022_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** true **Is Annotated:** true

Unit Measured: cells/ul

Description: cd8_cd44_cd62l_alpha_beta_effector_t_cell_number

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Equipment manufacturer SLM_PBI_023_001 | v1.0

procedureMetadata

Req. Analysis: true **Req. Upload:** true **Is Annotated:** false

Description: equipment_manufacturer

Options: BD Biosciences,

Equipment model SLM_PBI_024_001 | v1.0

procedureMetadata

Req. Analysis: true **Req. Upload:** true **Is Annotated:** false

Description: equipment_model

Options: LSR II,

Comment SLM_PBI_025_001 | v1.0

simpleParameter

Req. Analysis: false **Req. Upload:** false **Is Annotated:** false

Description: comment
