# ALTERNATIVE - Spleen Immunophenotyping ALTMGP\_IMM\_001

#### **Parameters and Metadata**

# ALTERNATIVE - Total T cells - % of CD45+ ALTMGP\_IMM\_001\_0 01 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_t\_cells\_of\_cd45

#### ALTERNATIVE - Ly6C+ CD5+ T cells - % of CD5+ T cells AL

TMGP\_IMM\_002\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - ly6c\_cd5\_t\_cells\_of\_cd5\_t\_cells

#### ALTERNATIVE - Total ab T cells - % of total T cells ALTMGP\_I

MM\_003\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_ab\_t\_cells\_of\_total\_t\_cells

#### ALTERNATIVE - Total CD4+ T cells - % of ab T cells ALTMGP

\_IMM\_004\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_cd4\_t\_cells\_of\_ab\_t\_cells

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#### ALTERNATIVE - CD4+ T helper cells - % of CD4+ ALTMGP\_IM

M\_005\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - cd4\_t\_helper\_cells\_of\_cd4

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# ALTERNATIVE - Effector CD4+ T helper cells - % of CD4+ T helper cells ALTMGP\_IMM\_006\_001 | v1.1

simpleParameter

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

Unit Measured: %

Description: ALTERNATIVE - effector cd4 t helper cells of cd4 t helper cells

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# ALTERNATIVE - Resting CD4+ T helper cells - % of CD4+ T helper cells ALTMGP\_IMM\_007\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - resting\_cd4\_t\_helper\_cells\_of\_cd4\_t\_helper\_cells

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# ALTERNATIVE - KLRG1+ CD4+ T helper cells - % of CD4+ T helper cells altmgp\_imm\_008\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - klrg1\_cd4\_t\_helper\_cells\_of\_cd4\_t\_helper\_cells

# ALTERNATIVE - Total Treg cells - % of CD4+ ALTMGP\_IMM\_009

\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

Description: ALTERNATIVE - total\_treg\_cells\_of\_cd4

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# ALTERNATIVE - Effector Treg cells - % of Treg ALTMGP\_IMM\_

010\_001 | v1.1 simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - effector\_treg\_cells\_of\_treg

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ALTERNATIVE - Resting Treg cells - % of Treg ALTMGP\_IMM\_0 11\_001 | v1.1

**Unit Measured:** %

**Description:** ALTERNATIVE - resting\_treg\_cells\_of\_treg

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# ALTERNATIVE - KLRG1+ Treg cells - % of Treg ALTMGP\_IMM\_

012\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - klrg1\_treg\_cells\_of\_treg

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### ALTERNATIVE - Total CD8+ T cells - % of ab T cells ALTMGP

\_IMM\_013\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - total\_cd8\_t\_cells\_of\_ab\_t\_cells

#### ALTERNATIVE - Effector CD8+ T cells - % of CD8+ ALTMGP I

MM\_014\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - effector\_cd8\_t\_cells\_of\_cd8

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#### ALTERNATIVE - Resting CD8+ T cells - % of CD8+ ALTMGP\_I

MM\_015\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - resting\_cd8\_t\_cells\_of\_cd8

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### ALTERNATIVE - Naive CD8+ T cells - % of CD8+ ALTMGP\_IMM

\_016\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - naive\_cd8\_t\_cells\_of\_cd8

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#### ALTERNATIVE - KLRG1+ CD8+ T cells - % of CD8+ ALTMGP\_

IMM\_017\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - klrg1\_cd8\_t\_cells\_of\_cd8

#### ALTERNATIVE - Total gd T cells - % of total T cells ALTMGP\_

IMM\_018\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - total\_gd\_t\_cells\_of\_total\_t\_cells

## ALTERNATIVE - CD5+ gd T cells - % of gd T cells ALTMGP\_IM

M\_019\_001 | v1.1

simpleParameter

**Unit Measured:** %

**Description:** ALTERNATIVE - cd5\_gd\_t\_cells\_of\_gd\_t\_cells

## ALTERNATIVE - Effector gd T cells - % of gd T cells ALTMGP

\_IMM\_020\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - effector\_gd\_t\_cells\_of\_gd\_t\_cells

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# ALTERNATIVE - Resting gd T cells - % of gd T cells ALTMGP

\_IMM\_021\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - resting\_gd\_t\_cells\_of\_gd\_t\_cells

#### ALTERNATIVE - KLRG1+ gd T cells - % of gd T cells ALTMG

P\_IMM\_022\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - klrg1\_gd\_t\_cells\_of\_gd\_t\_cells

### ALTERNATIVE - Total NKT cells - % of CD45+ ALTMGP\_IMM\_02

3\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - total\_nkt\_cells\_of\_cd45

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#### ALTERNATIVE - Ly6C+ NKT cells - % of NKT cells ALTMGP\_I

MM\_024\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - ly6c\_nkt\_cells\_of\_nkt\_cells

#### **ALTERNATIVE - Total CD4- NKT cells - % of NKT cells ALT**

MGP\_IMM\_025\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_cd4\_nkt\_cells\_of\_nkt\_cells

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# ALTERNATIVE - Effector CD4- NKT cells - % of CD4- NKT cells ALTMGP\_IMM\_026\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - effector\_cd4\_nkt\_cells\_of\_cd4\_nkt\_cells

# ALTERNATIVE - Resting CD4- NKT cells - % of CD4- NKT cells ALTMGP\_IMM\_027\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - resting\_cd4\_nkt\_cells\_of\_cd4\_nkt\_cells

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# ALTERNATIVE - KLRG1+ CD4- NKT cells - % of CD4- NKT cells ALTMGP\_IMM\_028\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - klrg1\_cd4\_nkt\_cells\_of\_cd4\_nkt\_cells

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#### **ALTERNATIVE - Total CD4+ NKT cells - % of NKT cells ALT**

MGP\_IMM\_029\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - total\_cd4\_nkt\_cells\_of\_nkt\_cells

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# ALTERNATIVE - Effector CD4+ NKT cells - % of CD4+ NKT cells ALTMGP\_IMM\_030\_001 | v1.1

**Unit Measured:** %

**Description:** ALTERNATIVE - effector\_cd4\_nkt\_cells\_of\_cd4\_nkt\_cells

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# ALTERNATIVE - Resting CD4+ NKT cells - % of CD4+ NKT cells ALTMGP\_IMM\_031\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - resting\_cd4\_nkt\_cells\_of\_cd4\_nkt\_cells

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# ALTERNATIVE - KLRG1+ CD4+ NKT cells - % of CD4+ NKT cells ALTMGP IMM 032 001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - klrg1\_cd4\_nkt\_cells\_of\_cd4\_nkt\_cells

### ALTERNATIVE - Total NK cells - % of CD45+ ALTMGP\_IMM\_033

\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_nk\_cells\_of\_cd45

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### ALTERNATIVE - Effector NK cells - % of NK cells altmgp\_im

M\_034\_001 | v1.1

simpleParameter

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

Unit Measured: %

Description: ALTERNATIVE - effector nk cells of nk cells

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### ALTERNATIVE - Resting NK cells - % of NK cells ALTMGP\_IM

M\_035\_001 | v1.1

simpleParameter

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

Unit Measured: %

ALTERNATIVE - KLRG1+ NK cells - % of NK cells ALTMGP\_IM
M\_036\_001 | v1.1
simpleParameter

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

Unit Measured: %

#### ALTERNATIVE - Immature NK cells - % of NK cells ALTMGP\_I

MM\_037\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - immature\_nk\_cells\_of\_nk\_cells

**Description:** ALTERNATIVE - klrg1\_nk\_cells\_of\_nk\_cells

# ALTERNATIVE - Ly6C+ immature NK cells - % of immature NK cells ALTMGP\_IMM\_038\_001 | v1.1

**Unit Measured:** %

**Description:** ALTERNATIVE - ly6c\_immature\_nk\_cells\_of\_immature\_nk\_cells

#### ALTERNATIVE - Mature NK cells - % of NK cells altmgp\_im

M\_039\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - mature\_nk\_cells\_of\_nk\_cellls

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# ALTERNATIVE - Ly6C+ mature NK cells - % of mature NK cells ALTMGP\_IMM\_040\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - ly6c\_mature\_nk\_cells\_of\_mature\_nk\_cells

#### ALTERNATIVE - Total B cells - % of CD45+ ALTMGP\_IMM\_041\_0

01 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_b\_cells\_of\_cd45

### ALTERNATIVE - B1a cells - % of B cells ALTMGP\_IMM\_042\_001 |

v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - b1a\_cells\_of\_b\_cells

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## ALTERNATIVE - Total B2 cells - % of B cells ALTMGP\_IMM\_043

\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - total\_b2\_cells\_of\_b\_cells

### ALTERNATIVE - Marginal zone B cells - % of B2 cells ALTM

GP\_IMM\_044\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - marginal\_zone\_b\_cells\_of\_b2\_cells

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# ALTERNATIVE - Marginal zone precursor B cells - % of B2 cells ALTMGP\_IMM\_045\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - marginal\_zone\_precursor\_b\_cells\_of\_b2\_cells

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# ALTERNATIVE - Transitional 1 B cells - % of B2 cells ALTMG

P\_IMM\_046\_001 | v1.1

simpleParameter

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

Unit Measured: %		
Description: ALTERNATIVE - transitional_1_b_cells_of_b2_cells		
ALTERNATIVE - Transitional 2 B cells - % of B2 cells ALTMG		
P_IMM_047_001   v1.1 simpleParameter		
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Unit Measured: %		
Description: ALTERNATIVE		

# ALTERNATIVE - Follicular B cells - % of B2 cells altmgp\_im

M\_048\_001 | v1.1

simpleParameter

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

Unit Measured: %

Description: ALTERNATIVE - follicular\_b\_cells\_of\_b2\_cells

**ALTERNATIVE - Germinal centre B cells - % of B2 cells** ALT MGP\_IMM\_049\_001 | v1.1

**Unit Measured:** %

**Description:** ALTERNATIVE - germinal\_centre\_b\_cells\_of\_b2\_cells

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# ALTERNATIVE - Early germinal centre B cells - % of GC cells ALTMGP\_IMM\_050\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - early\_germinal\_centre\_b\_cells\_of\_gc\_cells

.....

# ALTERNATIVE - Late germinal centre B cells - % of GC cells ALTMGP IMM 051 001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - late\_germinal\_centre\_b\_cells\_of\_gc\_cells

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### ALTERNATIVE - Plasma cells - % of B2 cells ALTMGP\_IMM\_052

\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - plasma\_cells\_of\_b2\_cells

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#### ALTERNATIVE - Memory B cells - % of B2 cells ALTMGP\_IMM\_

053\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - memory\_b\_cells\_of\_b2\_cells

# ALTERNATIVE - B2 marginal zone + precursor cells - % of B2 cells ALTMGP\_IMM\_054\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - b2\_marginal\_zone\_precursor\_cells\_of\_b2\_cells

#### ALTERNATIVE - B2 t1 + t2 cells - % of B2 cells ALTMGP\_IMM\_0

55\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - b2\_t1\_t2\_cells\_of\_b2\_cells

#### ALTERNATIVE - B2 t3 + f1 + f2 + gc cells - % of B2 cells AL

TMGP\_IMM\_056\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - b2\_t3\_f1\_f2\_gc\_cells\_of\_b2\_cells

### ALTERNATIVE - Total myeloid cells - % of CD45+ ALTMGP\_IM

M\_057\_001 | v1.1

simpleParameter

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_myeloid\_cells\_of\_cd45

### ALTERNATIVE - Macrophages - % of myeloid cells ALTMGP\_I

MM\_058\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

Description: ALTERNATIVE - macrophages\_of\_myeloid\_cells

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# ALTERNATIVE - Granulocytes + monocytes - % of myeloid cells ALTMGP\_IMM\_059\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - granulocytes\_monocytes\_of\_myeloid\_cells

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#### ALTERNATIVE - Granulocytes - % of myeloid cells ALTMGP\_I

MM\_060\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - granulocytes\_of\_myeloid\_cells

### ALTERNATIVE - Monocytes - % of myeloid cells ALTMGP\_IMM

\_061\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - monocytes\_of\_myeloid\_cells

#### ALTERNATIVE - Eosinophils - % of myeloid cells ALTMGP\_IM

M\_062\_001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - eosinophils\_of\_myeloid\_cells

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# ALTERNATIVE - Total DC - % of myeloid cells ALTMGP\_IMM\_06

3\_001 | v1.1

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_dc\_of\_myeloid\_cells

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## ALTERNATIVE - Plasmacytoid DC - % of DC ALTMGP\_IMM\_064\_

001 | v1.1

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - plasmacytoid\_dc\_of\_dc

### ALTERNATIVE - Conventional DC (cDC) - % of DC ALTMGP\_I

MM\_065\_001 | v1.1

simpleParameter

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

Unit Measured: % **Description:** ALTERNATIVE - conventional\_dc\_cdc\_of\_dc ALTERNATIVE - CD11b-high cDC - % of cDC ALTMGP\_IMM\_066 \_001 | v1.1 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: false Unit Measured: % **Description:** ALTERNATIVE - cd11b\_high\_cdc\_of\_cdc ALTERNATIVE - CD11b-low cDC - % of cDC ALTMGP IMM 067 001 | v1.1 simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - cd11b\_low\_cdc\_of\_cdc

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ALTERNATIVE - CD103+ CD11b-low cDC - % of CD11b-low cDC ALTMGP\_IMM\_068\_001 | v1.1

**Unit Measured:** %

**Description:** ALTERNATIVE - cd103\_cd11b\_low\_cdc\_of\_cd11b\_low\_cdc

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### ALTERNATIVE - Ly6C+ CD5+ T cells - % of lymphocytes A

LTMGP\_IMM\_069\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - ly6c\_cd5\_t\_cells\_of\_lymphocytes

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### ALTERNATIVE - Total ab T cells - % of CD45+ ALTMGP\_IMM\_07

0\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - total\_ab\_t\_cells\_of\_cd45

#### ALTERNATIVE - Total CD4+ T cells - % of CD45+ ALTMGP IM

M\_071\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_cd4\_t\_cells\_of\_cd45

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#### ALTERNATIVE - CD4+ T helper cells - % of CD45+ ALTMGP\_I

MM\_072\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - cd4 t helper cells of cd45

### ALTERNATIVE - Effector CD4+ T helper cells - % of CD45+

ALTMGP\_IMM\_073\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - effector\_cd4\_t\_helper\_cells\_of\_cd45

### ALTERNATIVE - Resting CD4+ T helper cells - % of CD45+

ALTMGP\_IMM\_074\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - resting\_cd4\_t\_helper\_cells\_of\_cd45

# ALTERNATIVE - KLRG1+ CD4+ T helper cells - % of CD45+ ALTMGP\_IMM\_075\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - klrg1\_cd4\_t\_helper\_cells\_of\_cd45

# ALTERNATIVE - Total Treg cells - % of CD45+ ALTMGP\_IMM\_0

76\_001 | v1.0

simpleParameter

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_treg\_cells\_of\_cd45

### ALTERNATIVE - Effector Treg cells - % of CD45+ ALTMGP\_IM

M\_077\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

Description: ALTERNATIVE - effector\_treg\_cells\_of\_cd45

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# ALTERNATIVE - Resting Treg cells - % of CD45+ ALTMGP\_IM

M\_078\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - resting\_treg\_cells\_of\_cd45

#### ALTERNATIVE - KLRG1+ Treg cells - % of CD45+ ALTMGP\_IM

M\_079\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - klrg1\_treg\_cells\_of\_cd45

#### ALTERNATIVE - Total CD8+ T cells - % of CD45+ ALTMGP\_IM

M\_080\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - total\_cd8\_t\_cells\_of\_cd45

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#### ALTERNATIVE - Effector CD8+ T cells - % of CD45+ ALTMGP

\_IMM\_081\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - effector\_cd8\_t\_cells\_of\_cd45

## ALTERNATIVE - Resting CD8+ T cells - % of CD45+ ALTMGP

\_IMM\_082\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured: %

Description: ALTERNATIVE - resting cd8 t cells of cd45

#### ALTERNATIVE - Naive CD8+ T cells - % of CD45+ ALTMGP IM

M\_083\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured: %

**Description:** ALTERNATIVE - naive\_cd8\_t\_cells\_of\_cd45

#### ALTERNATIVE - KLRG1+ CD8+ T cells - % of CD45+ ALTMG

P\_IMM\_084\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Unit Measured: %

**Description:** ALTERNATIVE - klrg1\_cd8\_t\_cells\_of\_cd45

#### ALTERNATIVE - Total gd T cells - % of CD45+ ALTMGP\_IMM\_08

5\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_gd\_t\_cells\_of\_cd45

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## ALTERNATIVE - CD5+ gd T cells - % of CD45+ ALTMGP\_IMM\_0

86\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - cd5\_gd\_t\_cells\_of\_cd45

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ALTERNATIVE - Effector gd cells - % of CD45+ ALTMGP\_IMM\_ 087\_001 | v1.0

**Unit Measured:** %

**Description:** ALTERNATIVE - effector\_gd\_cells\_of\_cd45

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#### ALTERNATIVE - Resting gd T cells - % of CD45+ ALTMGP\_IM

M\_088\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - resting\_gd\_t\_cells\_of\_cd45

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# ALTERNATIVE - KLRG1+ gd T cells - % of CD45+ ALTMGP\_IM

M\_089\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - klrg1\_gd\_t\_cells\_of\_cd45

#### ALTERNATIVE - Ly6C+ NKT cells - % of lymphocytes ALTM

GP\_IMM\_090\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - ly6c\_nkt\_cells\_of\_lymphocytes

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#### ALTERNATIVE - Total CD4- NKT cells - % of CD45+ ALTMGP

\_IMM\_091\_001 | v1.0

simpleParameter

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

Unit Measured: %

Description: ALTERNATIVE - total cd4 nkt cells of cd45

#### ALTERNATIVE - Effector CD4- NKT cells - % of CD45+ ALT

MGP IMM 092 001 | v1.0

simpleParameter

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

Unit Measured: %

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### **ALTERNATIVE - Resting CD4- NKT cells - % of CD45+ ALTM**

GP\_IMM\_093\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

Description: ALTERNATIVE - resting\_cd4\_nkt\_cells\_of\_cd45

Description: ALTERNATIVE - effector\_cd4\_nkt\_cells\_of\_cd45

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#### ALTERNATIVE - KLRG1+ CD4- NKT cells - % of CD45+ ALT

MGP\_IMM\_094\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - klrg1\_cd4\_nkt\_cells\_of\_cd45

#### ALTERNATIVE - Total CD4+ NKT cells - % of CD45+ ALTMGP

\_IMM\_095\_001 | v1.0

simpleParameter

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_cd4\_nkt\_cells\_of\_cd45

#### ALTERNATIVE - Effector CD4+ NKT cells - % of CD45+ ALT

MGP\_IMM\_096\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - effector\_cd4\_nkt\_cells\_of\_cd45

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## **ALTERNATIVE - Resting CD4+ NKT cells - % of CD45+ ALT**

MGP\_IMM\_097\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - resting\_cd4\_nkt\_cells\_of\_cd45

### ALTERNATIVE - KLRG1+ CD4+ NKT cells - % of CD45+ ALT

MGP\_IMM\_098\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

Description: ALTERNATIVE - klrg1\_cd4\_nkt\_cells\_of\_cd45

#### ALTERNATIVE - Effector NK cells - % of CD45+ ALTMGP\_IMM\_

099\_001 | v1.0

simpleParameter

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

Unit Measured: %

Description: ALTERNATIVE - effector\_nk\_cells\_of\_cd45

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#### ALTERNATIVE - Resting NK cells - % of CD45+ ALTMGP\_IMM\_

100\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - resting\_nk\_cells\_of\_cd45

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#### ALTERNATIVE - KLRG1+ NK cells - % of CD45+ ALTMGP\_IMM

\_101\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - klrg1\_nk\_cells\_of\_cd45

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## **ALTERNATIVE - Immature NK cells - % of lymphocytes** ALT

MGP\_IMM\_102\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - immature\_nk\_cells\_of\_lymphocytes

# ALTERNATIVE - Ly6C+ immature NK cells - % of lymphocytes ALTMGP\_IMM\_103\_001 | v1.0

simpleParameter

Unit	Measured:	%
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**Description:** ALTERNATIVE - ly6c\_immature\_nk\_cells\_of\_lymphocytes

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### **ALTERNATIVE - Mature NK cells - % of lymphocytes** ALTMG

P\_IMM\_104\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - mature\_nk\_cells\_of\_lymphocytes

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# ALTERNATIVE - Ly6C+ mature NK cells - % of lymphocytes ALTMGP\_IMM\_105\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - ly6c\_mature\_nk\_cells\_of\_lymphocytes

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

**Unit Measured:** %

**Description:** ALTERNATIVE - b1a\_cells\_of\_cd45

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## ALTERNATIVE - Total B2 cells - % of CD45+ ALTMGP\_IMM\_107\_

001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_b2\_cells\_of\_cd45

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## **ALTERNATIVE - Marginal zone B cells - % of CD45+** ALTMGP

\_IMM\_108\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - marginal\_zone\_b\_cells\_of\_cd45

## ALTERNATIVE - Marginal zone precursor B cells - % of CD45+ ALTMGP IMM 109 001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - marginal\_zone\_precursor\_b\_cells\_of\_cd45

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### ALTERNATIVE - Transitional 1 B cells - % of CD45+ ALTMGP

\_IMM\_110\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - transitional 1 b cells of cd45

#### ALTERNATIVE - Transitional 2 B cells - % of CD45+ ALTMGP

\_IMM\_111\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - transitional\_2\_b\_cells\_of\_cd45

## ALTERNATIVE - Follicular B cells - % of CD45+ ALTMGP\_IMM\_

112\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - follicular\_b\_cells\_of\_cd45

#### **ALTERNATIVE - Germinal centre B cells - % of CD45+** ALTM

GP\_IMM\_113\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - germinal\_centre\_b\_cells\_of\_cd45

## ALTERNATIVE - Early germinal centre B cells - % of CD45+ ALTMGP IMM 114 001 | v1.0

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

**Unit Measured:** %

**Description:** ALTERNATIVE - early\_germinal\_centre\_b\_cells\_of\_cd45

#### ALTERNATIVE - Late germinal centre B cells - % of CD45+

ALTMGP\_IMM\_115\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - late\_germinal\_centre\_b\_cells\_of\_cd45

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### ALTERNATIVE - Plasma cells - % of CD45+ ALTMGP\_IMM\_116\_0

01 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - plasma\_cells\_of\_cd45

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#### ALTERNATIVE - Memory B cells - % of CD45+ ALTMGP\_IMM\_1

17\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - memory\_b\_cells\_of\_cd45

# **ALTERNATIVE - B2 marginal zone + precursor cells - % of lymphocytes** ALTMGP\_IMM\_118\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - b2\_marginal\_zone\_precursor\_cells\_of\_lymphocytes

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## ALTERNATIVE - B2 t1 + t2 cells - % of lymphocytes ALTMGP

\_IMM\_119\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - b2\_t1\_t2\_cells\_of\_lymphocytes

# ALTERNATIVE - B2 t3 + f1+ f2 + gc cells - % of lymphocytes ALTMGP\_IMM\_120\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - b2\_t3\_f1\_f2\_gc\_cells\_of\_lymphocytes

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### ALTERNATIVE - Macrophages - % of CD45+ ALTMGP\_IMM\_121\_

001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - macrophages\_of\_cd45

### **ALTERNATIVE - Granulocytes + monocytes - % of CD45+**

ALTMGP\_IMM\_122\_001 | v1.0

simpleParameter

Unit Measured: %		
Description: ALTERNATIVE	- granulocytes_monocytes_of	_cd45
ALTERNATIVE - G	Granulocytes - % of	CD45+ ALTMGP_IMM_123_
001   v1.0 simpleParameter		
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Unit Measured: %		
Description: ALTERNATIVE	- granulocytes_of_cd45	
ALTERNATIVE - No. 1 v1.0 simpleParameter	lonocytes - % of CD	<b>945+</b> ALTMGP_IMM_124_001
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Unit Measured: %		

**Description:** ALTERNATIVE - monocytes\_of\_cd45

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

**Unit Measured:** %

**Description:** ALTERNATIVE - eosinophils\_of\_cd45

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## ALTERNATIVE - Total DC - % of CD45+ ALTMGP\_IMM\_126\_001 | v1

.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - total\_dc\_of\_cd45

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#### ALTERNATIVE - Plasmacytoid DC - % of CD45+ ALTMGP\_IMM

\_127\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - plasmacytoid\_dc\_of\_cd45

#### ALTERNATIVE - Conventional DC (cDC) - % of CD45+ ALTM

GP\_IMM\_128\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - conventional\_dc\_cdc\_of\_cd45

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### ALTERNATIVE - CD11b-high cDC - % of CD45+ ALTMGP\_IMM\_

129\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - cd11b\_high\_cdc\_of\_cd45

#### ALTERNATIVE - CD11b-low cDC - % of CD45+ ALTMGP IMM 1

30\_001 | v1.0

simpleParameter

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

Unit Measured: %

**Description:** ALTERNATIVE - cd11b\_low\_cdc\_of\_cd45

#### ALTERNATIVE - CD103+ CD11b-low cDC - % of CD45+ ALT

MGP\_IMM\_131\_001 | v1.0

simpleParameter

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

**Unit Measured:** %

**Description:** ALTERNATIVE - cd103\_cd11b\_low\_cdc\_of\_cd45

#### ALTERNATIVE - T cell panel CD45+ live cell count ALTMGP\_I

MM\_132\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - t\_cell\_panel\_cd45\_live\_cell\_count

#### ALTERNATIVE - B cell panel CD45+ live cell count ALTMGP\_I

MM\_133\_001 | v1.0

simpleParameter

**Description:** ALTERNATIVE - b\_cell\_panel\_cd45\_live\_cell\_count ALTERNATIVE - Myeloid panel CD45+ live cell count ALTMG P\_IMM\_134\_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: false **Description:** ALTERNATIVE - myeloid\_panel\_cd45\_live\_cell\_count ALTERNATIVE - Total T cells - cell count ALTMGP\_IMM\_135\_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: false **Description:** ALTERNATIVE - total\_t\_cells\_cell\_count

# ALTERNATIVE - Total CD5+ T cells - IMPC panel cell count ALTMGP\_IMM\_136\_001 | v1.0

simpleParameter

<b>Description:</b> ALTERNATIVE - total_cd5_t_cells_impc_panel_cell_count		
ALTERNATIVE - Ly  count ALTMGP_IMM_133  simpleParameter		IMPC panel cell
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE	- ly6c_cd5_t_cells_impc_panel	_cell_count
ALTERNATIVE - To 001   v1.0 simpleParameter	otal ab T cells - cell	COUNT ALTMGP_IMM_138_
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE	- total_ab_t_cells_cell_count	

## ALTERNATIVE - Total CD4+ T cells - cell count ALTMGP\_IMM\_

139\_001 | v1.0

simpleParameter

Description: ALTERNATIVE	- total_cd4_t_cells_cell_count	
ALTERNATIVE - CI _140_001   v1.0 simpleParameter	D4+ T helper cells -	cell count altmgp_imm
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE	- cd4_t_helper_cells_cell_coun	t

## **ALTERNATIVE - Effector CD4+ T helper cells - cell count** A

LTMGP\_IMM\_141\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - effector\_cd4\_t\_helper\_cells\_cell\_count

## **ALTERNATIVE - Resting CD4+ T helper cells - cell count** A

LTMGP\_IMM\_142\_001 | v1.0

simpleParameter

<b>Description:</b> ALTERNATIVE - resting_cd4_t_helper_cells_cell_count		
ALTERNATIVE - KI	•	er cells - cell count
ALTMGP_IMM_143_001   v simpleParameter	1.0	
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE	- klrg1_cd4_t_helper_cells_cel	I_count
ALTERNATIVE - To 001   v1.0 simpleParameter	otal Treg cells - cell	<b>count</b> ALTMGP_IMM_144_
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE	- total_treg_cells_cell_count	

## ALTERNATIVE - Effector Treg cells - cell count ALTMGP\_IMM\_

145\_001 | v1.0

simpleParameter

	_	
		ell count altmgp_imm_
146_001   v1.0 simpleParameter	esting freg cens - c	en count allwigp_liwim_
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE	- resting_treg_cells_cell_count	
ALTERNATIVE - KI 147_001   v1.0 simpleParameter	LRG1+ Treg cells - (	cell count altmgp_imm_
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE	- klrg1_treg_cells_cell_count	

Description: ALTERNATIVE - effector treg cells cell count

# ALTERNATIVE - Total CD8+ T cells - cell count ALTMGP\_IMM\_ 148\_001 | v1.0

simpleParameter

- total_cd8_t_cells_cell_count	
	- cell count ALTMGP_I
Req. Upload: true	Is Annotated: false
- effector_cd8_t_cells_cell_cou	
esting CD8+ T cells	- cell count ALTMGP_I
Req. Upload: true	Is Annotated: false
	Frector CD8+ T cells  Req. Upload: true  - effector_cd8_t_cells_cell_counter  esting CD8+ T cells

**Description:** ALTERNATIVE - resting\_cd8\_t\_cells\_cell\_count

## ALTERNATIVE - Naive CD8+ T cells - cell count ALTMGP\_IMM\_

151\_001 | v1.0

simpleParameter

**Description:** ALTERNATIVE - naive\_cd8\_t\_cells\_cell\_count ALTERNATIVE - KLRG1+ CD8+ T cells - cell count ALTMGP\_I MM\_152\_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: false **Description:** ALTERNATIVE - klrg1\_cd8\_t\_cells\_cell\_count ALTERNATIVE - Total gd T cells - cell count ALTMGP\_IMM\_153\_ 001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: false **Description:** ALTERNATIVE - total\_gd\_t\_cells\_cell\_count

## ALTERNATIVE - CD5+ gd T cells - cell count ALTMGP\_IMM\_154 \_001 | v1.0

simpleParameter

<b>Description:</b> ALTERNATIVE - cd5_gd_t_cells_cell_count		
		ell count altmgp_imm_
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE -	effector_gd_t_cells_cell_coun	t
ALTERNATIVE - Re 156_001   v1.0 simpleParameter	esting gd T cells - co	ell count altmgp_imm_
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE -	resting_gd_t_cells_cell_count	

## ALTERNATIVE - KLRG1+ gd T cells - cell count ALTMGP\_IMM\_

157\_001 | v1.0

simpleParameter

**Description:** ALTERNATIVE - klrg1\_gd\_t\_cells\_cell\_count ALTERNATIVE - Total NKT cells - cell count ALTMGP\_IMM\_158\_ 001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: false **Description:** ALTERNATIVE - total\_nkt\_cells\_cell\_count **ALTERNATIVE - Total NKT cells - IMPC panel cell count AL** TMGP\_IMM\_159\_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: false **Description:** ALTERNATIVE - total\_nkt\_cells\_impc\_panel\_cell\_count

### ALTERNATIVE - Ly6C+ NKT cells - IMPC panel cell count

ALTMGP\_IMM\_160\_001 | v1.0

simpleParameter

<b>Description:</b> ALTERNATIVE - ly6c_nkt_cells_impc_panel_cell_count		
ALTERNATIVE - To M_161_001   v1.0 simpleParameter	otal CD4- NKT cells	- cell count altmgp_im
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE -	- total_cd4_nkt_cells_cell_coun	t
ALTERNATIVE - Ef P_IMM_162_001   v1.0 simpleParameter	fector CD4- NKT ce	lls - cell count ALTMG
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE -	- effector_cd4_nkt_cells_cell_c	ount

## **ALTERNATIVE - Resting CD4- NKT cells - cell count** ALTMG

P\_IMM\_163\_001 | v1.0

simpleParameter

Description: ALTERNATIVE	- resting_cd4_nkt_cells_cell_cd	punt
ALTERNATIVE - KI P_IMM_164_001   v1.0 simpleParameter	LRG1+ CD4- NKT ce	ells - cell count altmg
Req. Analysis: false	Req. Upload: true	Is Annotated: false
•	- klrg1_cd4_nkt_cells_cell_cou	
ALTERNATIVE - To MM_165_001   v1.0 simpleParameter	otal CD4+ NKT cells	- cell count ALTMGP_I
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE	- total_cd4_nkt_cells_cell_cour	nt

## ALTERNATIVE - Effector CD4+ NKT cells - cell count ALTMG

P\_IMM\_166\_001 | v1.0

simpleParameter

<b>Description:</b> ALTERNATIVE - effector_cd4_nkt_cells_cell_count		
ALTERNATIVE - REP_IMM_167_001   v1.0		ells - cell count ALTMG
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE	- resting_cd4_nkt_cells_cell_cc	punt
ALTERNATIVE - KI GP_IMM_168_001   v1.0 simpleParameter	₋RG1+ CD4+ NKT c	ells - cell count ALTM
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE	- klrg1_cd4_nkt_cells_cell_cou	nt

# ALTERNATIVE - Total NK cells - cell count ALTMGP\_IMM\_169\_0 01 | v1.0

simpleParameter

**Description:** ALTERNATIVE - total\_nk\_cells\_cell\_count ALTERNATIVE - Effector NK cells - cell count ALTMGP\_IMM\_17 0\_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: false **Description:** ALTERNATIVE - effector\_nk\_cells\_cell\_count ALTERNATIVE - Resting NK cells - cell count ALTMGP\_IMM\_17 1\_001 | v1.0 simpleParameter Req. Analysis: false Req. Upload: true **Is Annotated:** false **Description:** ALTERNATIVE - resting\_nk\_cells\_cell\_count

### ALTERNATIVE - KLRG1+ NK cells - cell count ALTMGP\_IMM\_1

72\_001 | v1.0

simpleParameter

Description: ALTERNATIVE	- klrg1_nk_cells_cell_count	
ALTERNATIVE - To MGP_IMM_173_001   v1.0 simpleParameter	otal NK cells - IMPC	panel cell count ALT
Req. Analysis: false	Req. Upload: true	Is Annotated: false
•	- total_nk_cells_impc_panel_ce	
ALTERNATIVE - Imcount ALTMGP_IMM_178 simpleParameter	nmature NK cells - II 4_001   v1.0	MPC panel cell
Reg. Analysis: false	Reg. Upload: true	Is Annotated: false

**Description:** ALTERNATIVE - immature\_nk\_cells\_impc\_panel\_cell\_count

## **ALTERNATIVE - Ly6C+ immature NK cells - IMPC panel** cell count ALTMGP\_IMM\_175\_001 | v1.0

simpleParameter

<b>Description:</b> ALTERNATIVE - ly6c_immature_nk_cells_impc_panel_cell_count			
ALTERNATIVE - Ma LTMGP_IMM_176_001   v1. simpleParameter	ature NK cells - IMP	C panel cell count A	
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
Description: ALTERNATIVE - mature_nk_cells_impc_panel_cell_count			
		Is - IMPC panel cell	
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
<b>Description:</b> ALTERNATIVE - ly6c_mature_nk_cells_impc_panel_cell_count			

# ALTERNATIVE - Total B cells - cell count ALTMGP\_IMM\_178\_001 | v1.0

simpleParameter

Description: ALTERNATIVE - total_b_cells_cell_count			
ALTERNATIVE - B' 0 simpleParameter	1a cells - cell count	ALTMGP_IMM_179_001   v1.	
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
Description: ALTERNATIVE - b1a_cells_cell_count			
ALTERNATIVE - Total B2 cells - cell count ALTMGP_IMM_180_001			
v1.0 simpleParameter			
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
Description: ALTERNATIVE - total_b2_cells_cell_count			

## ALTERNATIVE - Marginal zone B cells - cell count ALTMGP\_I

MM\_181\_001 | v1.0

simpleParameter

Description: ALTERNATIVE - marginal_zone_b_cells_cell_count			
ALTERNATIVE - Marginal zone precursor B cells - cell count ALTMGP_IMM_182_001   v1.0 simpleParameter			
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
<b>Description:</b> ALTERNATIVE - marginal_zone_precursor_b_cells_cell_count			
		- cell count ALTMGP_I	
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
Description: ALTERNATIVE -	· transitional_1_b_cells_cell_cc	unt	

## ALTERNATIVE - Transitional 2 B cells - cell count ALTMGP\_I

MM\_184\_001 | v1.0

simpleParameter

<b>Description:</b> ALTERNATIVE - transitional_2_b_cells_cell_count			
ALTERNATIVE - FO	ollicular B cells - cel	II count ALTMGP_IMM_18	
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
Description: ALTERNATIVE - follicular_b_cells_cell_count			
ALTERNATIVE - Germinal centre B cells - cell count ALTMG P_IMM_186_001   v1.0 simpleParameter			
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
<b>Description:</b> ALTERNATIVE - germinal_centre_b_cells_cell_count			

## **ALTERNATIVE - Early germinal centre B cells - cell count**

ALTMGP\_IMM\_187\_001 | v1.0

simpleParameter

<b>Description:</b> ALTERNATIVE - early_germinal_centre_b_cells_cell_count		
ALTERNATIVE - La LTMGP_IMM_188_001   v1. simpleParameter	nte germinal centre	B cells - cell count A
Req. Analysis: false	Req. Upload: true	Is Annotated: false
	- late_germinal_centre_b_cells	
		<b>unt</b> ALTMGP_IMM_189_001
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE - plasma_cells_cell_count		
		COUNT ALTMOR IMM 190

#### ALTERNATIVE - Memory B cells - cell count ALTMGP\_IMM\_190\_ 001 | v1.0

simpleParameter

Description: ALTERNATIVE - memory_b_cells_cell_count		
ALTERNATIVE - To GP_IMM_191_001   v1.0 simpleParameter	otal B cells - IMPC p	anel cell count ALTM
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE - total_b_cells_impc_panel_cell_count		
	otal B2 cells - IMPC	panel cell count ALT
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE - total_b2_cells_impc_panel_cell_count		

# ALTERNATIVE - B2 marginal zone + precursor cells - IMPC panel cell count ALTMGP\_IMM\_193\_001 | v1.0

simpleParameter

**Description:** ALTERNATIVE - b2\_marginal\_zone\_precursor\_cells\_impc\_panel\_cell\_count

## ALTERNATIVE - B2 t1 + t2 cells - IMPC panel cell count ALT

MGP\_IMM\_194\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - b2\_t1\_t2\_cells\_impc\_panel\_cell\_count

## ALTERNATIVE - B2 t3 + f1+ f2 + gc cells - IMPC panel cell count ALTMGP\_IMM\_195\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - b2\_t3\_f1\_f2\_gc\_cells\_impc\_panel\_cell\_count

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#### ALTERNATIVE - Total myeloid cells - cell count ALTMGP\_IMM

\_196\_001 | v1.0

simpleParameter

Description: ALTERNATIVE - total_myeloid_cells_cell_count		
ALTERNATIVE - Male   v1.0   simpleParameter	acrophages - cell c	<b>OUNT</b> ALTMGP_IMM_197_00°
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE	- macrophages_cell_count	
ALTERNATIVE - GI TMGP_IMM_198_001   v1.0 simpleParameter		ocytes - cell count AL
Req. Analysis: false	Req. Upload: true	Is Annotated: false
Description: ALTERNATIVE - granulocytes_monocytes_cell_count		

# ALTERNATIVE - Granulocytes - cell count ALTMGP\_IMM\_199\_001 | v1.0

simpleParameter

Description: ALTERNATIVE - granulocytes_cell_count			
ALTERNATIVE - Me v1.0 simpleParameter	onocytes - cell cou	<b>nt</b> ALTMGP_IMM_200_001	
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
Description: ALTERNATIVE	- monocytes_cell_count		
ALTERNATIVE - Eosinophils - cell count ALTMGP_IMM_201_001   v1.0 simpleParameter			
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
Description: ALTERNATIVE	- eosinophils_cell_count		
ALTERNATIVE - Total DC - cell count ALTMGP_IMM_202_001   v1.0 simpleParameter			
Req. Analysis: false	Req. Upload: true	Is Annotated: false	
Description: ALTERNATIVE	- total_dc_cell_count		

## ALTERNATIVE - Plasmacytoid DC - cell count ALTMGP\_IMM\_2

03\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - plasmacytoid\_dc\_cell\_count

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# ALTERNATIVE - Conventional DC (cDC) - cell count ALTMGP

\_IMM\_204\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - conventional\_dc\_cdc\_cell\_count

# ALTERNATIVE - CD11b-high cDC - cell count ALTMGP\_IMM\_20

5\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - cd11b\_high\_cdc\_cell\_count

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# ALTERNATIVE - CD11b-low cDC - cell count ALTMGP\_IMM\_206

\_001 | v1.0

simpleParameter

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

Description: ALTERNATIVE - cd11b\_low\_cdc\_cell\_count

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## ALTERNATIVE - CD103+ CD11b-low cDC - cell count ALTMG

P\_IMM\_207\_001 | v1.0

simpleParameter

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

Description: ALTERNATIVE - cd103\_cd11b\_low\_cdc\_cell\_count

## ALTERNATIVE - T cell panel singlets cell count ALTMGP\_IMM\_

208\_001 | v1.0

simpleParameter

Reg. Analysis: false Reg. Upload: true Is Annotated: false

**Description:** ALTERNATIVE - t\_cell\_panel\_singlets\_cell\_count

## ALTERNATIVE - B cell panel singlets cell count ALTMGP\_IMM

\_209\_001 | v1.0

simpleParameter

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

Description: ALTERNATIVE - b\_cell\_panel\_singlets\_cell\_count

# ALTERNATIVE - Myeloid panel singlets cell count ALTMGP\_I

MM\_210\_001 | v1.0

simpleParameter

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

Description: ALTERNATIVE - myeloid\_panel\_singlets\_cell\_count

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# ALTERNATIVE - IMPC panel singlets cell count ALTMGP\_IMM\_

211\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - impc\_panel\_singlets\_cell\_count

# ALTERNATIVE - T cell panel live cell count ALTMGP\_IMM\_212\_0

01 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false **Description:** ALTERNATIVE - t\_cell\_panel\_live\_cell\_count ALTERNATIVE - B cell panel live cell count ALTMGP\_IMM\_213\_0 01 | v1.0 simpleParameter Req. Analysis: false Req. Upload: true Is Annotated: false Description: ALTERNATIVE - b\_cell\_panel\_live\_cell\_count ALTERNATIVE - Myeloid panel live cell count ALTMGP\_IMM\_21 4\_001 | v1.0 simpleParameter

Is Annotated: false

Reg. Analysis: false Reg. Upload: true

**Description:** ALTERNATIVE - myeloid\_panel\_live\_cell\_count

# ALTERNATIVE - IMPC panel live cell count ALTMGP\_IMM\_215\_0

01 | v1.0

simpleParameter

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

Description: ALTERNATIVE - impc\_panel\_live\_cell\_count

# **ALTERNATIVE - T cell panel lymphocyte gate cell count AL**

TMGP\_IMM\_216\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - t\_cell\_panel\_lymphocyte\_gate\_cell\_count

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# **ALTERNATIVE - B cell panel lymphocyte gate cell count** A

LTMGP\_IMM\_217\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - b\_cell\_panel\_lymphocyte\_gate\_cell\_count

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## **ALTERNATIVE - Myeloid panel lymphocyte gate cell count**

ALTMGP\_IMM\_218\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - myeloid\_panel\_lymphocyte\_gate\_cell\_count

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## **ALTERNATIVE - IMPC panel lymphocyte gate cell count** AL

TMGP\_IMM\_219\_001 | v1.0

simpleParameter

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

**Description:** ALTERNATIVE - impc\_panel\_lymphocyte\_gate\_cell\_count

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## ALTERNATIVE - 3i T cell panel ALTMGP\_IMM\_220\_001 | v1.0

procedureMetadata

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

**Description:** ALTERNATIVE - 3i\_t\_cell\_panel

#### **Options:**

(C) CD45 Qdot605, CD5 BV510, TCRd PE-Cy7, CD8a AF700, CD4 BV786, CD161 BV650, CD44 FITC, CD62L PerCP-Cy5.5, CD25 APC, KLRG1 BV421, GITR PE, Live/dead near IR, (A) CD45 NC605, TCRb AF700, TCRd PE-Cy7, CD8a BV510, CD4 BV786, CD161 BV650, CD44 FITC, CD62L PerCP-Cy5.5, CD25 APC, KLRG1 BV421, GITR PE,

(B) CD45 NC605, TCRb AF700, TCRd PE-Cy7, CD8a BV510, CD4 BV786, CD161 BV650, CD44 FITC, CD62L PerCP-Cy5.5, CD25 APC, KLRG1 BV421, GITR PE, Live/dead near IR, (D) failed,

## ALTERNATIVE - 3i B cell panel ALTMGP\_IMM\_221\_001 | v1.0

procedureMetadata

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

**Description:** ALTERNATIVE - 3i\_b\_cell\_panel

#### **Options:**

(C) CD45 Qdot605, B220 AF700, CD5 BV510, CD21/35 FITC, CD23 BV421, GL-7 AF647, IgM BV786, IgD PerCP-Cy5.5, IgG1 PE, CD95 PE-Cy7, CD138 BV650, Live/dead near IR, (A) CD45 NC605, B220 AF700, CD19 BV786, CD5 BV510, CD21/35 FITC, CD23 BV421, GL-7 PE, IgM PE-Cy7, CD93 PerCP-Cy5.5, CD138 BV650, Live/dead near IR, (B) CD45 NC605, B220 AF700, CD19 BV786, CD5 BV510, CD21/35 FITC, CD23 BV421, GL-7 AF647, IgM PE-Cy7, IgD PerCP-Cy5.5, CD93 PE, CD138 BV650, Live/dead near IR, (D) failed,

### ALTERNATIVE - 3i Myeloid panel ALTMGP\_IMM\_222\_001 | v1.0

procedureMetadata

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

**Description:** ALTERNATIVE - 3i\_myeloid\_panel

#### **Options:**

(B) CD45 Qdot605, CD11c BV786, CD11b BV510, F4/80 PerCP-Cy5.5, CD103 PE, CD317 BV650, CD86 PE-Cy7, MHC II FITC, Ly6C AF700, Ly6G APC, Dump (CD3, CD19, CD161) BV421, Live/dead near IR,

(A) CD45 NC605, CD11c BV711, CD11b BV510, F4/80 PerCP-Cy5.5, CD103 PE, CD317 APC, CD86 PE-Cy7, MHC II FITC, Gr1 AF700, Dump (CD3, CD19, CD161) BV421, Live /dead near IR,(C) failed,

## ALTERNATIVE - 3i IMPC panel 2 ALTMGP\_IMM\_223\_001 | v1.0

procedureMetadata

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

**Description:** ALTERNATIVE - 3i\_impc\_panel\_2

#### **Options:**

(B) CD19 PE-Cy7, CD5 APC, CD161 BV650, CD21/35 PE, CD11b BV510, CD11c BV786, Ly6C AF700, Ly6G APC, MHC II FITC, CD23 BV421, Live/dead near IR,

(A) not applicable, (C) failed,

# **ALTERNATIVE - Tissue dissociation method** ALTMGP\_IMM\_224 \_001 | v1.0

procedureMetadata

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

**Description:** ALTERNATIVE - tissue\_dissociation\_method

Options: GentleMACS, Pestle, Centrifugation,

# ALTERNATIVE - Collagenase digestion ALTMGP\_IMM\_225\_001 | v1 .0

procedureMetadata

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

**Description:** ALTERNATIVE - collagenase\_digestion

Options: Yes, No,

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# **ALTERNATIVE - Buffers and enzymes** ALTMGP\_IMM\_226\_001 | v1.

0

procedureMetadata

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

**Description:** ALTERNATIVE - buffers\_and\_enzymes

Options: IMPC, pre-IMPC,

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## ALTERNATIVE - FACS sample status ALTMGP\_IMM\_227\_001 | v1.0

procedureMetadata

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

**Description:** ALTERNATIVE - facs\_sample\_status

Options: Fresh, Fixed, Analysed next day unfixed, Prepared next day, analysed fresh,

## ALTERNATIVE - FACS equipment name ALTMGP\_IMM\_228\_001 |

v1.0

procedureMetadata

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

**Description:** ALTERNATIVE - facs\_equipment\_name

Options: Flow cytometer,

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## ALTERNATIVE - FACS equipment manufacturer ALTMGP\_IMM

\_229\_001 | v1.0

procedureMetadata

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

**Description:** ALTERNATIVE - facs\_equipment\_manufacturer

Options: Beckton Dickinson, Beckman Coulter,

# ALTERNATIVE - FACS equipment model ALTMGP\_IMM\_230\_001 |

v1.0

procedureMetadata

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

**Description:** ALTERNATIVE - facs\_equipment\_model

Options: LSR Fortessa X20, LSR II, FC500,

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## ALTERNATIVE - Comments ALTMGP\_IMM\_231\_001 | v1.0

procedureMetadata

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

**Description:** ALTERNATIVE - comments

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## **ALTERNATIVE - Anesthesia used for blood collection ALTM**

GP\_IMM\_232\_001 | v1.1

procedureMetadata

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

**Description:** ALTERNATIVE - null

Options: Injection narcosis with Ketamine (100mg/kg)/Xylazine (10mg/kg),

Injection narcosis with Tribromoethanol (Avertin),

# **ALTERNATIVE - Images associated with FACS analysis AL**

TMGP\_IMM\_233\_001 | v1.0

seriesMediaParameter

Req. Analysis: false	Req. Upload: false	Is Annotated: false
Description: ALTERNATIVE -		