Immunophenotyping Packages (Mouse)

NEW Expanded CompLeukocyte™

Panel 1: Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD3	Pan-T cell marker
CD4	CD4+ T cell marker
CD8	CD8+ T cell marker
FoxP3	Regulatory T cell marker
CD25	Regulatory T cell marker
CD44	Activation/Memory marker
CD62L	Naïve T cell/Memory marker
PD-1	Activation/Exhaustion marker
CD69	Activation marker
LAG-3	Activation/Exhaustion marker
TIM-3	Exhaustion marker
ICOS	Activation marker
Granzyme B	Cytotoxicity marker
Ki-67	Proliferation marker
CD49b/CD335	Natural killer/Natural killer T cell marker
Viability Dye	Dead cell exclusion

Panel 2: Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD19	B cell marker
CD11b	Pan-myeloid lineage marker
Ly-6G	Granulocytic-MDSC/ Neutrophil marker
Ly-6C	Monocytic-MDSC/Monocyte marker
CD11c	Dendritic cell marker
CD24	Dendritic cell delineation
F4/80	Pan-macrophage marker
MHC Class II	M1 macrophage & dendritic cell marker
CD206	M2 macrophage marker
XCR1	Cross presenting/Migratory dendritic cell marker
CD80	Maturation marker
CD86	Maturation marker
ARG1	Myeloid functional marker
iNOS	Myeloid functional marker
PD-L1	T cell inhibitory signaling protein
CD3	T cell exclusion
Viability Dye	Dead cell exclusion

Panel 3: Antibody/Dye	Description
Counting Fluorosphere Beads	Cell enumeration reagent
CD45	Pan-hematopoietic cell marker
Viability Dye	Dead cell exclusion

Provides absolute counts, quantitation of 13 lymphoid and myeloid subsets, memory T cell measurements, and analysis of 12 functional markers to profile T cell, dendritic cell, macrophage, and MDSC phenotypes.

NEW Cytokine/Granzyme B™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD3	Pan-T cell marker
CD4	CD4+ T cell marker
CD8	CD8+ T cell marker
CD49b/CD335	Natural killer/Natural killer T cell marker
IFNγ	Proinflammatory cytokine
ΤΝΓα	Proinflammatory cytokine
IL-2	T cell activator
Granzyme B	Cytotoxicity marker
CD107a	Degranulation marker
Viability Dye	Dead cell exclusion

Measures cytokine and granzyme B responses in 4 lymphocyte subsets following ex vivo stimulation of tissue-derived cells with PMA and ionomycin. IL-2 can be substituted with other cytokines including IL-4 and IL-17a.

CompLeukocyte™

Panel 1: Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD3	Pan-T cell marker
CD4	CD4+ T cell marker
CD8	CD8+ T cell marker
FoxP3	Regulatory T cell marker
CD25	Regulatory T cell marker
PD-1	Activation/Exhaustion marker
CD69*	Activation marker
Ki-67	Proliferation marker
CD49b/CD335	Natural killer/Natural killer T cell marker
Viability Dye	Dead cell exclusion

*CD69 can be substituted with alternative markers including LAG3, ICOS, or CTLA-4.

Panel 2: Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD19	B cell marker
CD11b	Pan-myeloid lineage marker
Ly-6G	Granulocytic-MDSC/ Neutrophil marker
Ly-6C	Monocytic-MDSC/Monocyte marker
CD11c	Dendritic cell marker
CD24	Dendritic cell delineation
F4/80	Pan-macrophage marker
MHC Class II	M1 macrophage & dendritic cell marker
CD206	M2 macrophage marker
Viability Dye	Dead cell exclusion

Panel 3: Antibody/Dye	Description
Counting Fluorosphere Beads	Cell enumeration reagent
CD45	Pan-hematopoietic cell marker
Viability Dye	Dead cell exclusion

 $Provides\ absolute\ counts,\ comprehensive\ analysis\ for\ 11\ lymphoid\ and\ myeloid\ subsets,\ and\ T\ cell\ activation\ analysis.$

All Covance Preclinical Oncology standard immunophenotyping flow cytometry panels are copywrited. Unauthorized disclosure is prohibited.

Client shall not reverse engineer, perform any studies to determine the structure or chemical composition, or elucidate the physical properties in which any of our processes or panels have been created.

Lymphoid Lineage Panels (Mouse)

NEW Expanded CompT™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD3	Pan-T cell marker
CD4	CD4+ T cell marker
CD8	CD8+ T cell marker
FoxP3	Regulatory T cell marker
CD25	Regulatory T cell marker
CD44	Activation/Memory marker
CD62L	Naïve T cell/Memory marker
Ki-67	Proliferation marker
CD69	Activation marker
PD-1	Activation/Exhaustion marker
LAG-3	Activation/Exhaustion marker
TIM-3	Exhaustion marker
ICOS	Activation marker
Granzyme B	Cytotoxicity marker
Viability Dye	Dead cell exclusion

The Expanded CompT™ can be customized to include NK/NKT cell markers (CD49b/CD335) to enable granzyme B and activation marker expression in these subsets.

CompT™

Description
Pan-hematopoietic cell marker
Pan-T cell marker
CD4+ T cell marker
CD8+ T cell marker
Regulatory T cell marker
Regulatory T cell marker
Activation/Exhaustion marker
Activation marker
Proliferation marker
Dead cell exclusion

Provides analysis of three disctinct T cell subsets plus activation profiles. *CD69 can be substituted with alternative markers including LAG3, ICOS, or CTLA-4.

NK™

Description
Pan-hematopoietic cell marker
Natural killer/Natural killer T cell marker
Pan-T cell marker/T cell exclusion
Myeloid-derived suppressor cell exclusion
Myeloid-derived suppressor cell exclusion
B cell marker/B cell exclusion
NK cell maturation marker
NK cell maturation marker
Cytotoxicity marker
Dead cell exclusion

The NK™ includes CD11b and CD27 to enable measurements of four different maturation states of the NK cell subset, as well as granzyme B to assess NK/NKT cell activation.

T Effector/Memory™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD3	Pan-T cell marker
CD4	CD4+ T cell marker
CD8	CD8+ T cell marker
CD44	Activation/Memory marker
CD62L	Naïve T cell/Memory marker
Viability Dye	Dead cell exclusion

BasicT™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD3	Pan-T cell marker
CD4	CD4+ T cell marker
CD8	CD8+ T cell marker
Viability Dye	Dead cell exclusion

Treg™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD3	Pan-T cell marker
CD4	CD4+ T cell marker
CD8	CD8+ T cell marker
CD25	Regulatory T cell marker
FoxP3	Regulatory T cell marker
Viability Dye	Dead cell exclusion

BasicT&B™

Dasierab	
Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD3	Pan-T cell marker
CD4	CD4+ T cell marker
CD8	CD8+ T cell marker
CD19	B cell marker
Viability Dye	Dead cell exclusion

Т А&Е™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD3	Pan-T cell marker
CD4	CD4+ T cell marker
CD8	CD8+ T cell marker
PD-1	Activation/Exhaustion marker
CD69*	Activation marker
Ki-67	Proliferation marker
Viability Dye	Dead cell exclusion
Provides analysis of proliferation and activation/exhaustion markers in T cells *CD69 can be	

Provides analysis of proliferation and activation/exhaustion markers in T cells. *CD69 can be substituted with alternative markers including LAG3, ICOS, or CTLA-4.

All Covance Preclinical Oncology standard immunophenotyping flow cytometry panels are copywrited. Unauthorized disclosure is prohibited.

Client shall not reverse engineer, perform any studies to determine the structure or chemical composition, or elucidate the physical properties in which any of our processes or panels have been created.

Myeloid Lineage Panels (Mouse)

NEW Expanded CompMyeloid™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD11b	Pan-myeloid lineage marker
Ly-6G	Granulocytic-MDSC/ Neutrophil marker
Ly-6C	Monocytic-MDSC/Monocyte marker
CD11c	Dendritic cell marker
CD24	Dendritic cell delineation
F4/80	Pan-macrophage marker
MHC Class II	M1 macrophage & dendritic cell marker
CD206	M2 macrophage marker
XCR1	Cross presenting/Migratory dendritic cell marker
CD80	Maturation marker
CD86	Maturation marker
ARG1	Myeloid functional marker
iNOS	Myeloid functional marker
PD-L1	T cell inhibitory signaling protein
CD3/CD19	T and B cell exclusion
Viability Dye	Dead cell exclusion

Provides immunophenotypic analysis of 7 distinct myeloid subsets including granulocytic myeloidderived suppressor cell (G-MDSC)/neutrophils, monocytic (M-) MDSC/monocyte subsets, M1 and M2 Macrophages (MAC), and DC1, DC2 and XCR1+ dendritic cell (DC) subsets. Includes the measurement of total MACs. Included is the analysis of 5 myeloid functional markers to profile dendritic cell, macrophage, and MDSC phenotypes.

CompMyeloid™

company cross	
Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD11b	Pan-myeloid lineage marker
F4/80	Pan-macrophage marker
CD24	Macrophage exclusion/Dendritic cell delineation
Ly-6C	Monocytic-MDSC/Monocyte marker
MHC Class II	M1 macrophage & dendritic cell marker/Antigen presentation
CD206	M2 macrophage marker
Ly-6G	Granulocytic-MDSC/Neutrophil marker
CD11c	Dendritic cell marker
CD3/CD19	T and B cell exclusion
Viability Dye	Dead cell exclusion

Provides analysis of five disctinct myeloid subsets.

CompDC™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
F4/80, Ly-6G, CD19	Macrophage, granulocyte, and B cell exclusion
CD11c	Dendritic cell marker
CD24	Dendritic cell delineation
CD8	DC1 subset marker
MHC Class II	Dendritic cell marker/Antigen presentation
CD103	DC1 subset marker
CD11b	DC2 subset marker
XCR1	Cross presenting/Migratory dendritic cell marker
CD80	Maturation marker
CD86	Maturation marker
Viability Dye	Dead cell exclusion

The CompDC TM can be customized to analyze inflammatory DC and plasmacytoid DC subsets by substituting in Ly-6C/CD206 and Siglec-H respectively.

CompMDSC™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD11b	Pan-myeloid lineage marker
Ly-6C	Monocytic-MDSC/Monocyte marker
Ly-6G	Granulocytic-MDSC/Neutrophil marker
CD115	Monocyte marker/MDSC characterization
CD11c	Dendritic cell marker/MDSC characterization
F4/80	Macrophage marker/MDSC characterization
PD-L1	T cell inhibitory signaling protein
CD3/CD19	T and B cell exclusion
Viability Dye	Dead cell exclusion

Provides in depth characterization of myeloid-derived suppressor cells.

MDSC™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD11b	Pan-myeloid lineage marker
Ly-6C	Monocytic-MDSC/Monocyte marker
Ly-6G	Granulocytic-MDSC/Neutrophil marker
CD3/CD19	T and B Cell exclusion
Viability Dye	Dead cell exclusion

 ${\it Provides\ basic\ characterization\ of\ myeloid-derived\ suppressor\ cells.}$

Client shall not reverse engineer, perform any studies to determine the structure or chemical composition, or elucidate the physical properties in which any of our processes or panels have been created.

All Covance Preclinical Oncology standard immunophenotyping flow cytometry panels are copywrited. Unauthorized disclosure is prohibited.

Lymphoid Lineage Panel (Human)

NEW PersistenceT™

Description
Pan-hematopoietic cell marker
Pan-T cell marker
CD4+ T cell marker
CD8+ T cell marker
Empty channel to add a client-provided probe (FITC, PE, APC, or other fluor)
Mouse immune cell exclusion
Provides absolute counts
Dead cell exclusion

Combines absolute counts and circulating human T cell immunophenotyping into 1 panel using a lyse/no wash blood processing procedure.

NEW CompT™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD3	Pan-T cell marker
CD4	CD4+ T cell marker
CD8	CD8+ T cell marker
CD25	Regulatory T cell marker
FoxP3	Regulatory T cell marker
PD-1	Activation/Exhaustion marker
CD69	Activation marker
Ki-67	Proliferation marker
CD45 (mouse)	Mouse immune cell exclusion
Viability Dye	Dead cell exclusion

 $Provides\ analysis\ of\ three\ disctinct\ human\ T\ cell\ subsets\ plus\ a\ limited\ activation\ profile.$

NEW CompMyeloid™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD20	B cell marker
CD11b	Pan-myeloid lineage marker
CD68	Pan-macrophage marker
CD33	Granulocytic-MDSC/ Neutrophil marker
CD66b	Monocytic-MDSC/Monocyte marker
HLA-DR	M1 macrophage/Dendritic cell marker
CD163	M2 macrophage marker
CD11c	Dendritic cell marker
BDCA1 (CD1)	DC1 subset marker
BDCA3 (CD141)	DC2 subset marker
CD86	Maturation marker
CD14	Monocyte marker
CD15	Granulocyte marker
CD45 (mouse)	Mouse immune cell exclusion
Viability Dye	Dead cell exclusion

Provides analysis of human MDSC, macrophage and dendritic cell subsets.

BasicT™

Antibody/Dye	Description
CD45	Pan-hematopoietic cell marker
CD3	Pan-T cell marker
CD4	CD4+ T cell marker
CD8	CD8+ T cell marker
CD45 (mouse)	Mouse immune cell exclusion
Viability Dve	Dead cell exclusion

All Covance Preclinical Oncology standard immunophenotyping flow cytometry panels are copywrited. Unauthorized disclosure is prohibited.

Client shall not reverse engineer, perform any studies to determine the structure or chemical composition, or elucidate the physical properties in which any of our processes or panels have been created.