

Customer

Flow cytometry reagent and antibody



Flow cytometry reagent and antibody

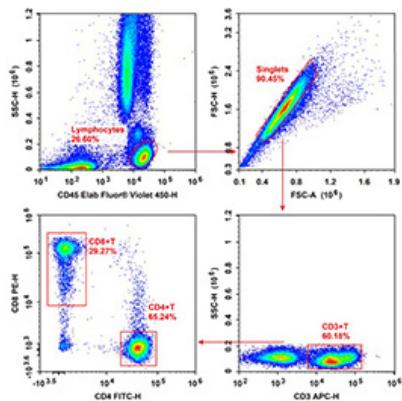
Flow Cytometry (FCM) directly detects antigens using fluorescently conjugated antibodies. These labeled antibodies cause individual cells or particles to become fluorescent, enabling them to be sorted by the Flow Cytometer or cell sorter.

Elabscience® offers a wide selection of Flow Cytometry antibodies with various dye options and an extensive range of both intracellular and extracellular protein targets to choose from. The labeling efficiency and affinity of these antibodies have been validated, ensuring you get the most suitable antibody for your Flow Cytometry research.

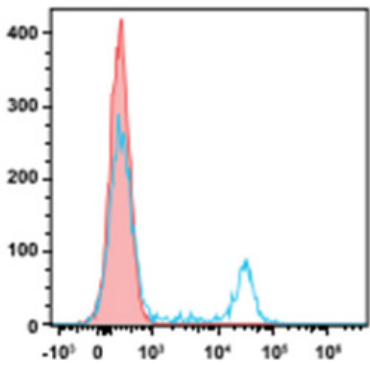
Elabscience® can provide Panel Design Services, helping you quickly and easily complete your Flow Cytometry multi-color panel available for your Flow Cytometer. In addition, Elabscience® can also provide free Spectrum viewer Tool and professional Flow Cytometry Data Analysis Services, truly providing you with an overall Flow Cytometry solution.



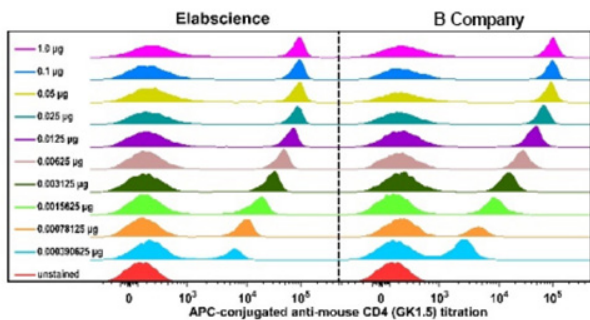
Advantages of Elabscience® Flow Cytometry Antibodies



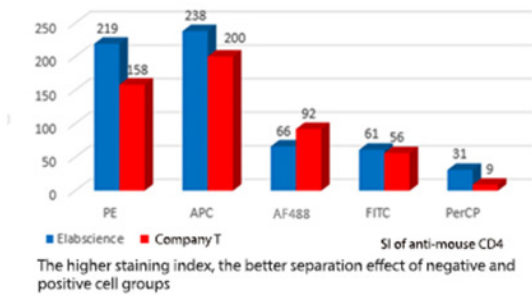
Extraordinary performance in multicolor Flow Cytometry experiments



Optimizing the fluorescence coupling technique to reduce background interference in FCM staining.



A good separation effect can be achieved across multiple concentration gradients



Advanced labeling technology ensures the reliability of experimental results.



Elabscience® Hot Flow Cytometry Antibodies

Cell Subpopulation	Species	Target
T Cells	Human	CD3-PE · CD4-FITC · CD8a-APC
	Mouse	CD3-PE · CD4-FITC · CD8a-APC
B Cells	Human	CD3-FITC · CD19-APC
	Mouse	CD3-FITC · CD19-APC
NK Cells	Human	CD45-APC · CD3-FITC · CD16-PE · CD56-PE
	BALB/c Mouse	CD3-FITC · CD49b-APC
	C57BL/6 Mouse	CD3-FITC · NK1.1-APC
Th1/Th2/Th17 Cells	Human	CD3-PerCP/Cyanine5.5 · CD4-FITC · IFN-γ-PE · IL-4-APC
	Mouse	CD3-PerCP/Cyanine5.5 · CD4-FITC · IFN-γ-PE · IL-4-APC
Treg Cells	Human	CD4-FITC · CD25-PE · CD127-APC
	Mouse	CD4-FITC · CD25-PE · CD127-APC

Elabscience® Flow Cytometry Antibodies Labels

Fluorochrome	Fluorescence Emission Color	Excitation Laser Lines (nm)	Excitation Max(nm)	Emission Max(nm)	Relative Fluorochrome Brightness
Elab Fluor® Violet 450	Blue	405	410	450	● ●
Elab Fluor® Violet 500	Green	405	410	501	●
Elab Fluor® 488	Green	488	495	520	● ● ●
Elab Fluor® 488	Green	488	490	530	● ● ●
FITC	Yellow	405	402	548	● ●
Elab Fluor®Violet 540	Yellow	488/561	495, 565	575	● ● ● ● ●
PE	Orange	405	421	613	● ●
Elab Fluor®Violet 610	Orange	488/561	495, 565	620	● ● ● ● ●
PE/Elab Fluor® 594	Red	633	650	660	● ● ● ●
APC	Red	633	650	670	● ● ● ●
Elab Fluor® 647	Red	488/561	495, 565, 655	670	● ● ● ●
PE/Cyanine5	Red	488	440, 480, 675	675	●
PerCP	Red	488	440, 480, 675	675	● ● ●
PerCP/Cyanine5.5	Far Red	488/561	495, 565, 675	690	● ● ● ●
Elab Fluor®700	Far Red	640	696	719	● ● ● ●
PE/Cyanine7	Infrared	488/561	495, 565, 755	775	● ● ● ● ●
Elab Fluor® Red 780	Infrared	633	625	765	● ●
APC/Cyanine7	Infrared	633	650, 760	780	●



PROMOTION

Flow cytometry reagent and antibody

PROMO 20%

From the **1st of January 2026**
to the **31st of December 2026**

SKU	Description	List Price	Net Price
E-CK-A105-500ML	10×ACK Lysis Buffer - Size: 500mL	45,00 €	36,00 €
E-CK-A111-200TESTS	Annexin V-FITC Reagent - Size: 200Tests	298,00 €	238,40 €
E-CK-A211-200ASSAYS	Annexin V-FITC/PI Apoptosis Kit - Size: 200Assays	350,00 €	280,00 €
E-AB-FC0003-100TESTSX2	Anti-Human CD3-FITC/CD4-PE/CD45-PerCP-Cyanine5.5 Cocktail - Size: 100Tes	365,00 €	292,00 €
E-AB-F1209E-100TESTSX2	APC Anti-Human CD14 Antibody[M5E2] - Size: 100Testsx2	192,00 €	153,60 €
E-AB-F1161E-100TESTSX2	APC Anti-Human CD206/MMR Antibody[15-2] - Size: 100Testsx2	396,00 €	316,80 €
E-AB-F1214E-100TESTSX2	APC Anti-Human CD40 Antibody[G28.5] - Size: 100Testsx2	312,00 €	249,60 €
E-CK-A107-500ML	Cell Staining Buffer - Size: 500mL	60,00 €	48,00 €
E-AB-F1310L-100TESTSX2	Elab Fluor® 488 Anti-Human CD105 Antibody[SN6] - Size: 100Testsx2	330,00 €	264,00 €
E-AB-F1159M-100TESTSX2	Elab Fluor® 647 Anti-Human CD197/CCR7 Antibody[G043H7] - Size: 100Testsx	390,00 €	312,00 €
E-AB-F1152M1-100TESTSX2	Elab Fluor® 700 Anti-Human CD127/IL-7RA Antibody[A019D5] - Size: 100Test	425,00 €	340,00 €
E-AB-F1133M1-100TESTSX2	Elab Fluor® 700 Anti-Human CD274/PD-L1 Antibody[29E.2A3] - Size: 100TEST	330,00 €	264,00 €
E-AB-F1209S-100TESTSX2	Elab Fluor® Red 780 Anti-Human CD14 Antibody[M5E2] - Size: 100Testsx2	330,00 €	264,00 €
E-AB-F1001S-100TESTSX2	Elab Fluor® Red 780 Anti-Human CD3 Antibody[OKT-3] - Size: 100Testsx2	200,00 €	160,00 €

SKU	Description	List Price	Net Price
E-AB-F1109S-100TESTSX2	Elab Fluor® Red 780 Anti-Human CD4 Antibody[RPA-T4] - Size: 100Testsx2	200,00 €	160,00 €
E-AB-F1111S-100TESTSX2	Elab Fluor® Red 780 Anti-Human HLA-DR Antibody[L243] - Size: 100Testsx2	330,00 €	264,00 €
E-AB-F1118M1-100TESTSX2	Elab Fluor®700 Anti-Human CD11c Antibody[BU15] - Size: 100Testsx2	420,00 €	336,00 €
E-AB-F1110M1-100TESTSX2	Elab Fluor®700 Anti-Human CD8a Antibody[OKT-8] - Size: 100Testsx2	200,00 €	160,00 €
E-AB-F1196M1-100TESTSX2	Elab Fluor®700 Anti-Human IFN-γ Antibody[B27] - Size: 100Testsx2	360,00 €	288,00 €
E-AB-F1110T-100TESTSX2	Elab Fluor®Violet 610 Anti-Human CD8a Antibody[OKT-8] - Size: 100Testsx2	200,00 €	160,00 €
E-AB-F1155C-100TESTSX2	FITC Anti-Human CD161 Antibody[HP-3G10] - Size: 100Testsx2	330,00 €	264,00 €
E-AB-F1161C-100TESTSX2	FITC Anti-Human CD206/MMR Antibody[15-2] - Size: 100Testsx2	285,00 €	228,00 €
E-AB-F1037C-100TESTSX2	FITC Anti-Human CD40 Antibody[3A8] - Size: 100Testsx2	264,00 €	211,20 €
E-AB-F1038C-100TESTSX2	FITC Anti-Human CD44 Antibody[P2A1] - Size: 100Testsx2	220,00 €	176,00 €
E-AB-F1137C-100TESTSX2	FITC Anti-Human CD45 Antibody[HI30] - Size: 100Testsx2	98,00 €	78,40 €
E-AB-F1051C-100TESTSX2	FITC Anti-Human CD62L Antibody[DREG56] - Size: 100Testsx2	166,00 €	132,80 €
E-AB-F1242C-100TESTS	FITC Anti-Human CD73 Antibody[AD2] - Size: 100Tests	190,00 €	152,00 €
E-AB-F1365C-100TESTSX2	FITC Anti-Human CD80 Antibody[2F4] - Size: 100Testsx2	276,00 €	220,80 €
E-AB-F1111C-100TESTSX2	FITC Anti-Human HLA-DR Antibody[L243] - Size: 100Testsx2	192,00 €	153,60 €
E-AB-F1310D-100TESTS	PE Anti-Human CD105 Antibody[SN6] - Size: 100Tests	240,00 €	192,00 €
E-AB-F1118D-100TESTSX2	PE Anti-Human CD11c Antibody[BU15] - Size: 100Testsx2	312,00 €	249,60 €
E-AB-F1268D-100TESTSX2	PE Anti-Human CD133 Antibody[W6B3C1] - Size: 100Testsx2	270,00 €	216,00 €
E-AB-F1080D-100TESTSX2	PE Anti-Human CD235 Antibody[HIR2] - Size: 100Testsx2	285,00 €	228,00 €
E-AB-F1143D-100TESTSX2	PE Anti-Human CD34 Antibody[581] - Size: 100Testsx2	330,00 €	264,00 €

SKU	Description	List Price	Net Price
E-AB-F1352D-100TESTSX2	PE Anti-Human CD4 Antibody[SK3] - Size: 100Testsx2	120,00 €	96,00 €
E-AB-F1037D-100TESTSX2	PE Anti-Human CD40 Antibody[3A8] - Size: 100Testsx2	264,00 €	211,20 €
E-AB-F1267D-100TESTSX2	PE Anti-Human CD66b Antibody[G10F5] - Size: 100Testsx2	408,00 €	326,40 €
E-AB-F1232D-100TESTSX2	PE Anti-Human CD80 Antibody[2D10] - Size: 100Testsx2	260,00 €	208,00 €
E-AB-F1110D-100TESTSX2	PE Anti-Human CD8a Antibody[OKT-8] - Size: 100Testsx2	105,00 €	84,00 €
E-AB-F1167D-100TESTS	PE Anti-Human CD90 Antibody[5E10] - Size: 100Tests	264,00 €	211,20 €
E-AB-F1196D-100TESTSX2	PE Anti-Human IFN- γ Antibody[B27] - Size: 100Testsx2	342,00 €	273,60 €
E-AB-F09832D-100TESTSX2	PE Rat IgG2a, k Isotype Control[2A3] - Size: 100Testsx2	112,00 €	89,60 €
E-AB-F1152H-100TESTSX2	PE/Cyanine7 Anti-Human CD127/IL-7RA Antibody[A019D5] - Size: 100Testsx2	468,00 €	374,40 €
E-AB-F1158H-100TESTSX2	PE/Cyanine7 Anti-Human CD196/CCR6 Antibody[G034E3] - Size: 100Testsx2	425,00 €	340,00 €
E-AB-F1194H-100TESTSX2	PE/Cyanine7 Anti-Human CD25 Antibody[BC96] - Size: 100Testsx2	396,00 €	316,80 €
E-AB-F1137H-100TESTSX2	PE/Cyanine7 Anti-Human CD45 Antibody[HI30] - Size: 100Testsx2	276,00 €	220,80 €
E-AB-F1236P-100TESTSX2	PE/Elab Fluor® 594 Anti-Human CD16 Antibody[3G8] - Size: 100Testsx2	425,00 €	340,00 €
E-AB-F1045P-100TESTSX2	PE/Elab Fluor® 594 Anti-Human CD20 Antibody[BCA/B20] - Size: 100Testsx2	330,00 €	264,00 €
E-AB-F1109F-100TESTSX2	PerCP Anti-Human CD4 Antibody[RPA-T4] - Size: 100Testsx2	276,00 €	220,80 €

SKU	Description	List Price	Net Price
E-AB-F1152J-100TESTSX2	PerCP/Cyanine5.5 Anti-Human CD127/IL-7RA Antibody[A019D5] - Size: 100Tes	510,00 €	408,00 €
E-AB-F1126J-100TESTSX2	PerCP/Cyanine5.5 Anti-Human CD1a Antibody[OKT-6] - Size: 100Testsx2	432,00 €	345,60 €
E-AB-F1229J-100TESTSX2	PerCP/Cyanine5.5 Anti-Human CD279/PD-1 Antibody[EH12.2H7] - Size: 100Tes	468,00 €	374,40 €
E-AB-F1305J-100TESTSX2	PerCP/Cyanine5.5 Anti-Human CD56/NCAM Antibody[B-A19] - Size: 100Testsx2	510,00 €	408,00 €
E-AB-F1136J-100TESTSX2	PerCP/Cyanine5.5 Anti-Mouse CD45 Antibody[30-F11] - Size: 100Testsx2	155,00 €	124,00 €
E-AB-F1236A-1MG	Purified Anti-Human CD16 Antibody[3G8] - Host: Mouse - Species reactivit	148,00 €	118,40 €
E-AB-F0997A-1MG	Purified Anti-Mouse CD16/32 Antibody[2.4G2] - Host: Rat - Species reacti	148,00 €	118,40 €

Antibody Test

29 10 2025

Human test subject

Buffy-coated blood (Healthy donor, n = 1) was obtained from the ASST Grande Ospedale Metropolitano Niguarda, Milan, Italy.

PBMC isolation

Peripheral blood mononuclear cells (PBMCs) were isolated by density-gradient centrifugation using Ficoll-Paque (Sigma-Aldrich) following the standard protocol.

Plating and culture condition

After isolation, PBMCs were plated in a 96-well plate at 5×10^5 cells per well and cultured at 37 °C, 5% CO₂ in either: RPMI-1640 + 10% FBS (baseline control), or RPMI-1640 + 10% FBS supplemented with 20% cell-free supernatant (CFS) from *Intestinibacter bartlettii*.

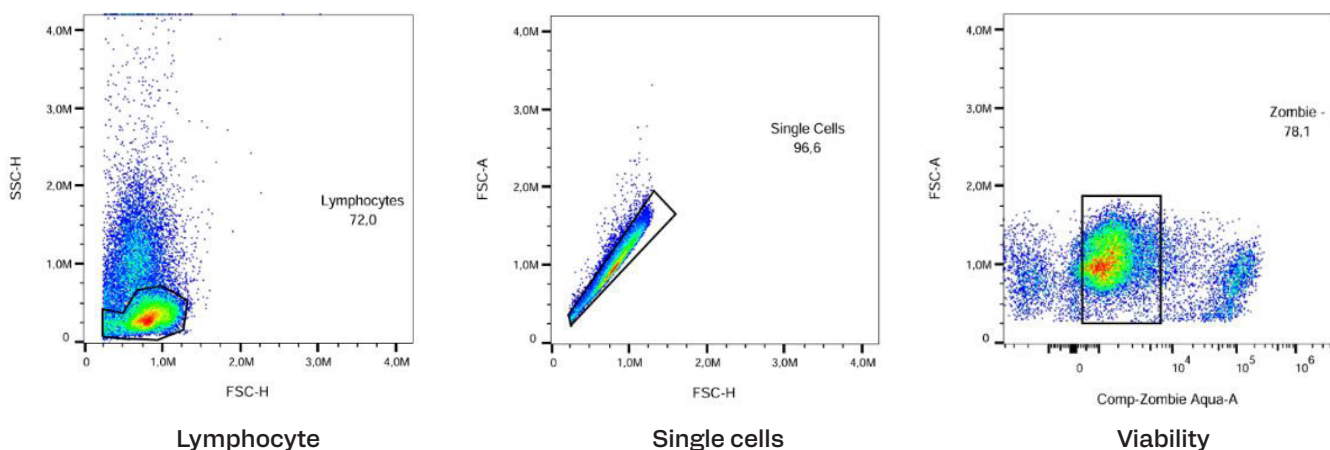
Rationale for conditioning

Some readouts of interest are stimulus dependent, IFN- γ (intracellular cytokine) and activation/exhaustion-related markers (CD69, PD-L1) change primarily after an external stimulus. To ensure that antibody performance was assessed across both negative and positive expression states, cells were conditioned with either RPMI or *I. bartlettii* CFS to model biological complexity and then subjected to functional stimulation. This approach maximizes the chance of detecting differences in marker expression, allows for direct assessment of antibody sensitivity.

Target / Marker	Fluorochrome	Stain type	Working amount
CD3	eFluor 450	Surface	0.5 µL / 5×10 ⁵ cells
CD4	PE-Cy7	Surface	0.5 µL / 5×10 ⁵ cells
CD8	Alexa Fluor 700	Surface	0.5 µL / 5×10 ⁵ cells
TCR γδ	FITC	Surface	0.5 µL / 5×10 ⁵ cells
iNKT (6B11)	PE	Surface	0.5 µL / 5×10 ⁵ cells
IFN-γ	FITC	Intracellular	0.5 µL / 5×10 ⁵ cells
PD-L1	PE	Surface	0.5 µL / 5×10 ⁵ cells
CD69	PE-Cy7	Surface	0.5 µL / 5×10 ⁵ cell
CD11c	CD11c	Surface	0.5 µL / 5×10 ⁵ cell

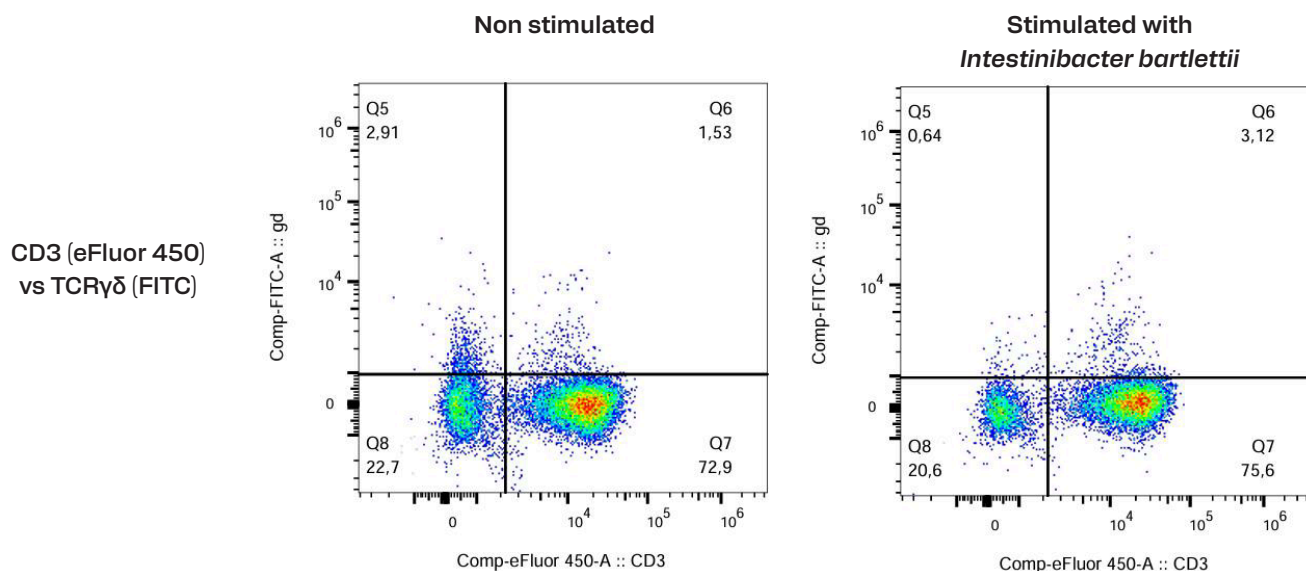
Flow cytometry

Cells were stained with labeled antibodies diluted in PBS for 20 min at 4°C. For intracellular cytokine labelling cells were incubated for 3 h at 37°C in RPMI-1640 + 10% FBS with PMA (50 ng/ml, Merck), Ionomycin (1 µg/ml, Merck) and Brefeldin A (10 µg/ml, Merck). Before intracellular staining, cells were fixed and permeabilized using Cytofix/Cytoperm (BD). Samples were analyzed with a three-laser Cytex Aurora full-spectrum flow cytometer (Cytex Biosciences) and the FlowJo software (Version 10.8, TreeStar, Ashland, OR USA). To minimize spectral spread/background and avoid overly high MFIs, antibodies were used at 0.5 µL per 5×10^5 cells in 50 µL (1:100). (Higher volumes can push channels toward saturation on full-spectrum systems, using lower volumes preserved clear positive/negative separation while reducing spillover.) Gating was applied sequentially: lymphocytes were identified by FSC/SSC parameters, singlets were selected using FSC-A vs FSC-H, and viable cells were retained by gating on Zombie Aqua⁺ events. All downstream marker analysis was performed on this gated live lymphocyte population:

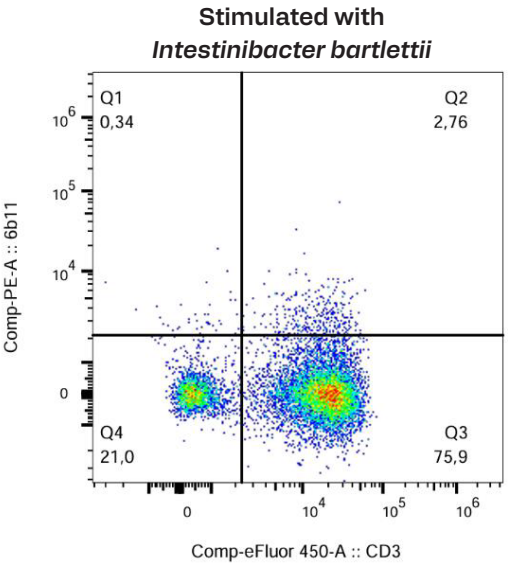
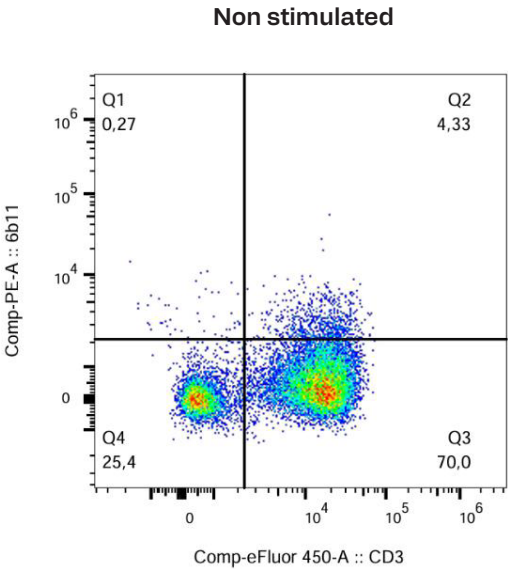


To reduce figure load while preserving interpretability, plots were limited to the essential bivariate views plus fluorescence-minus-one controls (FMOs, the experimental cells stained with all the fluorophores minus one fluorophore):

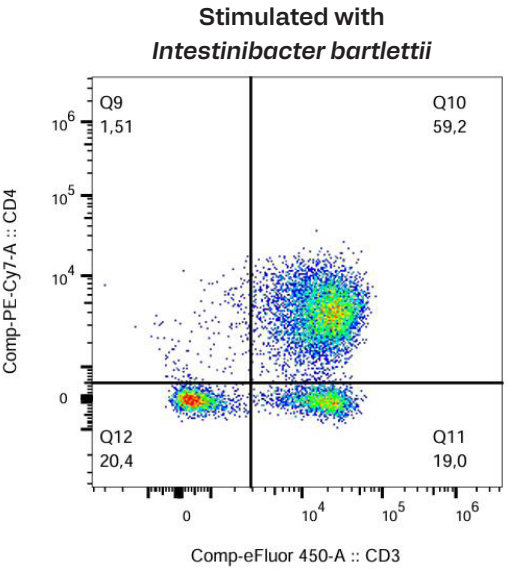
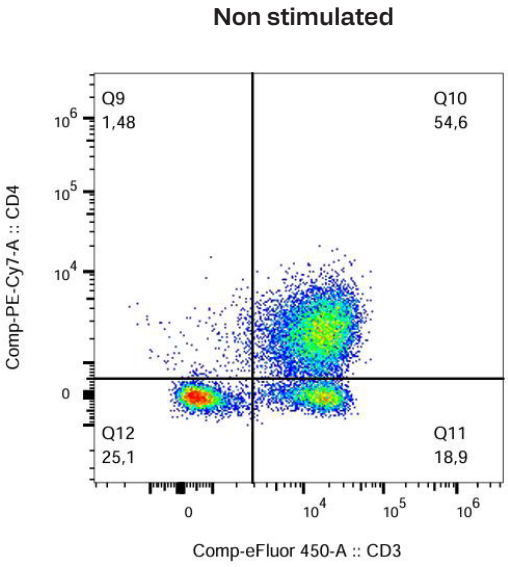
- **CD3, CD4, CD8, TCR $\gamma\delta$,6B11:** CD3 vs target plots, with single-stains and FMOs used to set thresholds. For display, CD3 is shown in the non-stimulated condition; CD8 is shown in the stimulated condition (stimulus-independent marker, representative plot).
- **IFN- γ , PD-L1:** IFN- γ vs PD-L1 bivariate plots in stimulated samples, with FMOs for each.
- **CD11c vs CD69:** direct bivariate view (CD11c vs CD69) plus FMOs for both reagents.



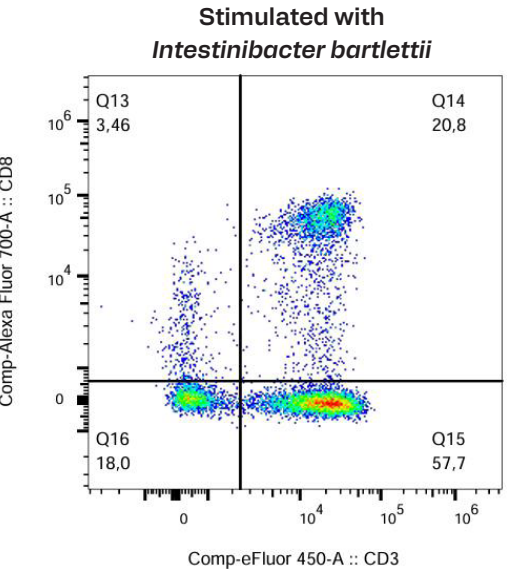
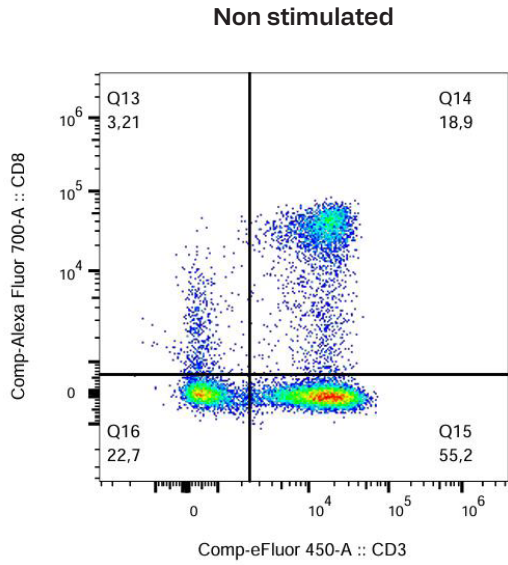
CD3 (eFluor450)
vs 6B11 (PE)

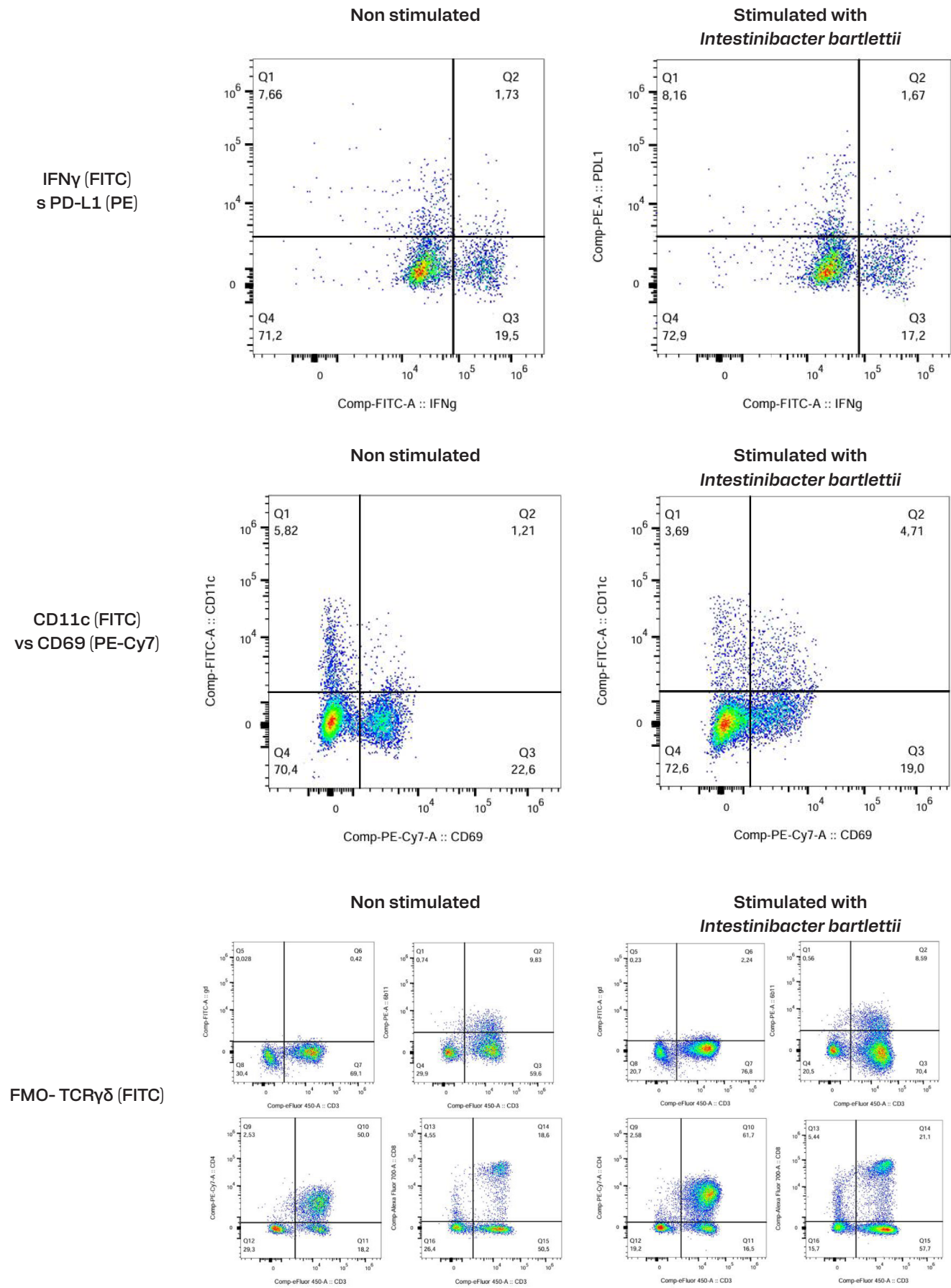


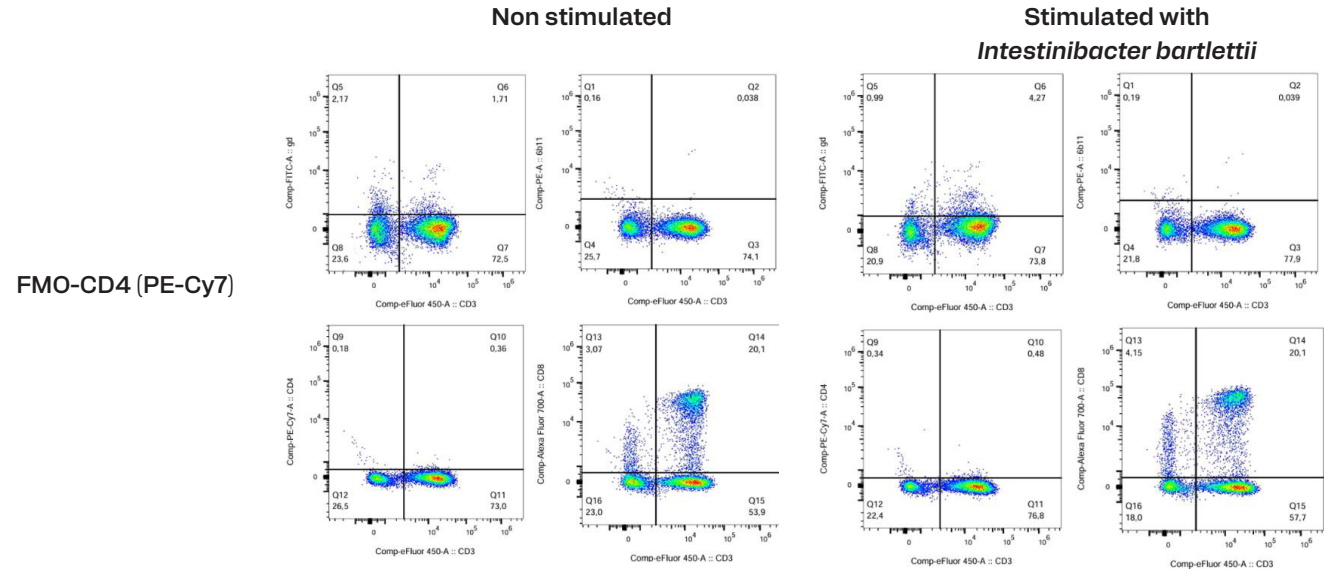
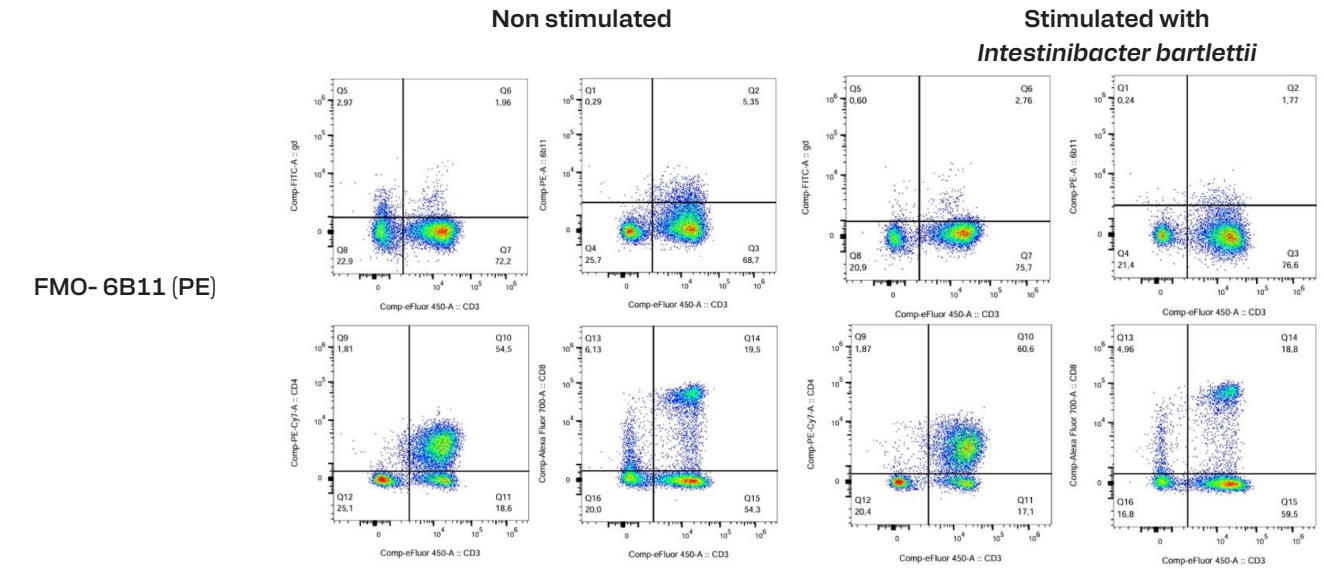
CD3 (eFluor 450)
vs CD4 (PE-Cy7)



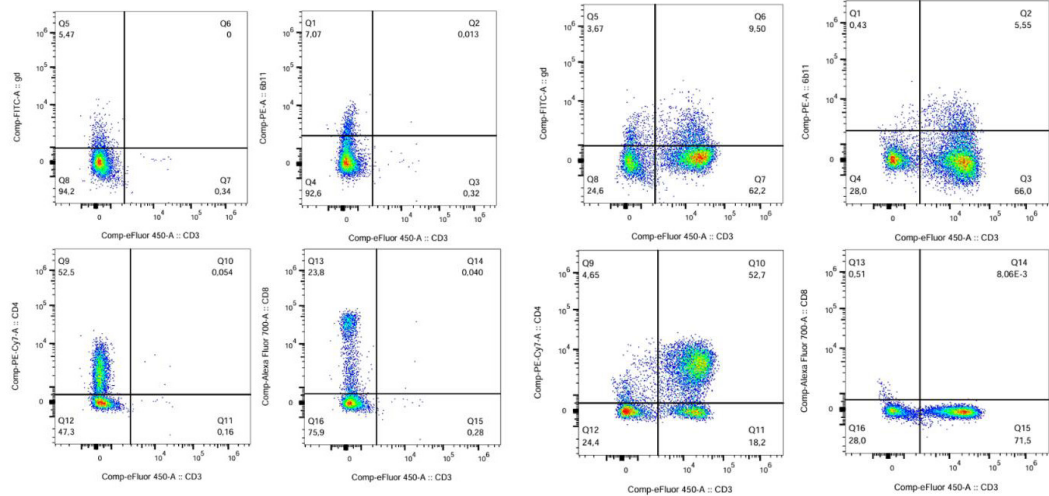
CD3 (eFluor 450)
vs CD8 (Alexa Fluor
700)







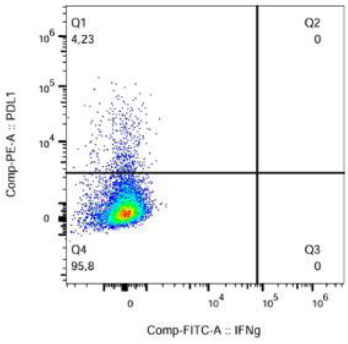
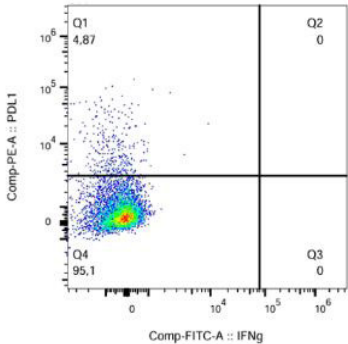
FMO- CD3 (eFluor 450) **FMO-CD8 (Alexa Fluor 700)**



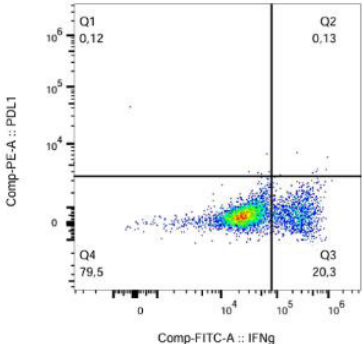
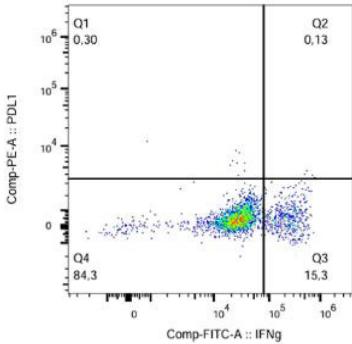
Non stimulated

Stimulated with
Intestinibacter bartlettii

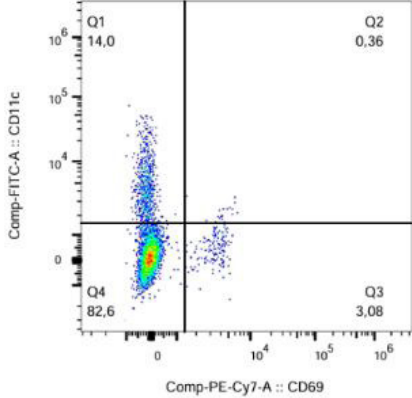
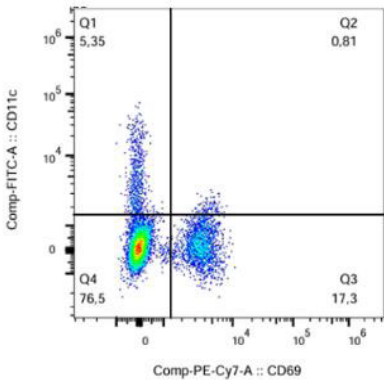
FMO- PD-L1 (PE)



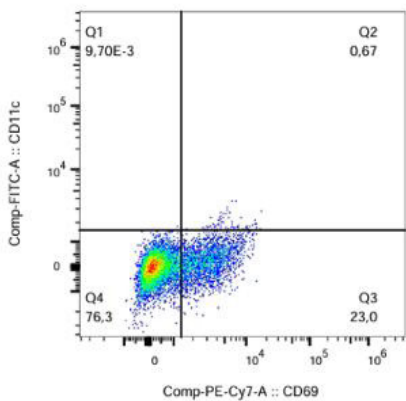
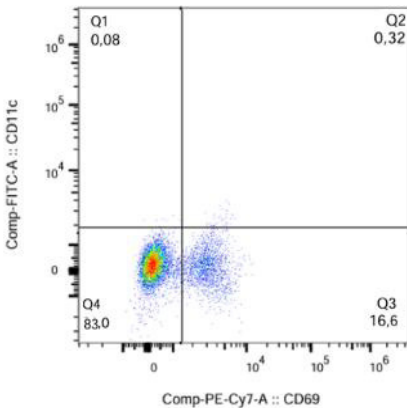
FMO- IFNγ (FITC)



FMO- CD69 (PE-
Cy7)



FMO- CD11c (FITC)



Antibody performance

TCR $\gamma\delta$ (FITC): In CD3 vs TCR $\gamma\delta$, a discrete CD3⁺TCR $\gamma\delta$ ⁺ population is resolved with clear separation from negatives. FMO-TCR $\gamma\delta$ shows no residual cloud in the positive gate, confirming the threshold.

CD3 (eFluor 450): In CD3 vs CD4 and CD3 vs CD8 bivariate plots, the CD3⁺ compartment is robust with tight CD3⁺ negatives. FMO-CD3 is clean with no events above the positivity threshold.

CD4 (PE-Cy7): In CD3 vs CD4, CD3⁺CD4⁺ cells segregate clearly from CD3⁺CD4⁻. FMO-CD4 shows minimal background and supports a conservative cut-off.

CD8 (Alexa Fluor 700): In CD3 vs CD8 a distinct CD3⁺CD8⁺ subset is cleanly separated from negatives. FMO-CD8 is negative with no clouding in the CD8⁺ region.

PD-L1 (PE): In IFN- γ vs PD-L1 after stimulation, PD-L1 shows a clear up-shift from baseline with a well-defined PD-L1⁺ cluster. FMO-PD-L1 displays minimal background, validating the positivity gate.

IFN- γ (FITC, intracellular): In IFN- γ vs PD-L1, reveals a discrete IFN- γ ⁺ population clearly separated from the baseline. FMO-IFN- γ is clean, confirming the threshold.

CD69 (PE-Cy7) In CD11c vs CD69, stimulation yields CD69⁺ shift with a less-defined positive cluster, overall population are resolved with clear separation from negatives. **FMO-CD69** is clean and supports a conservative threshold. Note that the apparent CD69⁺ events seen in **FMO-CD11c** arise from FITC spread/unmixing and are not due to the CD69 reagent itself.

Antibody-specific issues

iNKT (6B11, PE): In CD3 vs 6B11 a PE⁺ cloud appears in the expected iNKT region. However, FMO-6B11 shows a similar cloud in Q2, indicating non-specific/background PE signal.

CD11c (FITC): In CD11c vs CD69 the bivariate appears acceptable, but FMO-CD11c shows a cloud within the CD69⁺ gate (Q3) even without CD69 staining. This pattern is not present in the CD69 single-stain, consistent with related spread or imperfect unmixing projecting into the CD69 channel.

Summary Table

Target / Marker	Fluorochrome	Key observation	Status
CD3	eFluor 450	Robust CD3 ⁺ compartment; negatives compact; FMO clean.	PASS
CD4	PE-Cy7	CD3 ⁺ CD4 ⁺ subset clearly separated; low FMO background.	PASS
CD8	Alexa Fluor 700	Distinct CD3 ⁺ CD8 ⁺ subset; FMO clean.	PASS
TCR γδ	FITC	Clear CD3 ⁺ TCRγδ ⁺ cluster; no residual cloud in FMO.	PASS
IFN-γ	FITC	Discrete positive population; FMO clean (post fix/perm).	PASS
PD-L1	PSSE	Clear positive shift; minimal FMO background; gate validated.	PASS
CD69	PE-Cy7	Positive shift with separation from negatives; FMO clean.	PASS
iNKT (6B11)	PE	PE ⁺ cluster present; a similar distribution appears in FMO-6B11 (Q2).	ISSUES
CD11c	FITC	FMO-CD11c shows events in the CD69 ⁺ gate; absent in CD69 single-stain.	ISSUES

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University of Milano-Bicocca



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