

Supplementary figures

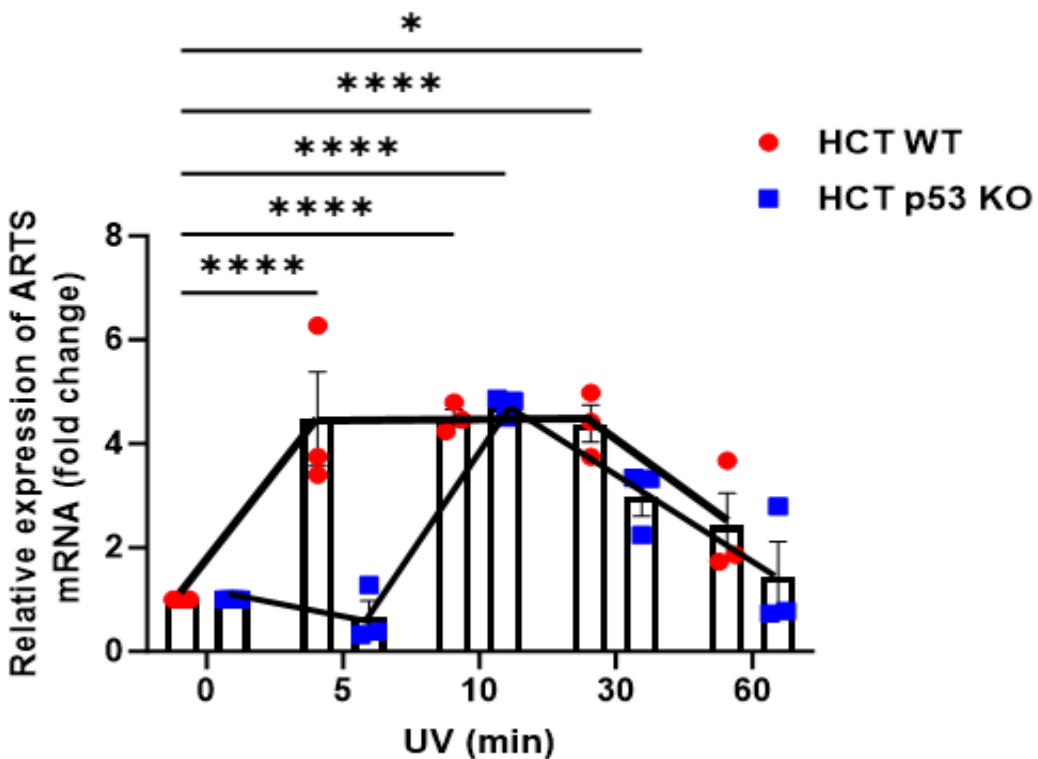
Supplementary figure.1 Real-Time PCR results. WT HCT116 and p53 KO HCT116 cells were induced for apoptosis with UV for the indicated time points. Real-Time PCR was performed, and cDNAs were normalized to GPI (housekeeping gene). Under apoptotic conditions, a strong upregulation of ARTS was observed after 5 minutes of UV treatment in WT cells. The graph represents three independent experiments and is plotted as mean $\pm$ SEM. Statistical analysis was carried out by GraphPad Prism software using a two-way ANOVA. Statistical significance is denoted by *, **, or *** to indicate $P < 0.05$, $P < 0.001$, or $P < 0.0001$, respectively.

Supplementary figure.2 Differential cancer cell killing by B3. IC₅₀ values (μ M) for a panel of 94 tumor cell lines (NCI-60 extended panel) treated with B3. Six concentrations of B3 were used to calculate the IC₅₀ values for each cell line. Differential cell death effects of B3 on various cancer cell lines were observed. Normal PBMC (peripheral blood mononuclear cells) were resistant to killing by B3.

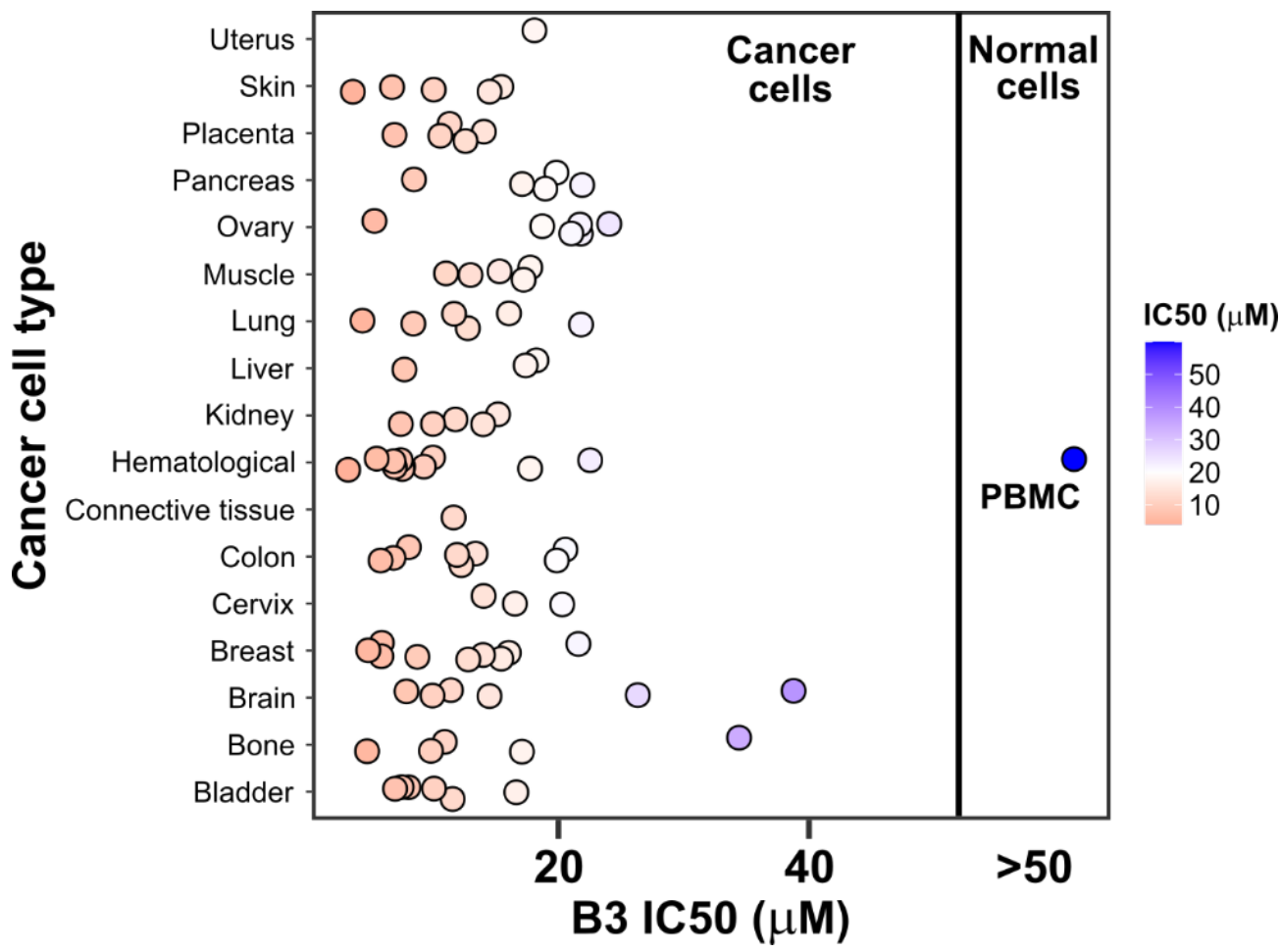
Supplementary figure.3 Flow cytometry plots of BiFC assays show the percentage of cells expressing fluorescent YFP (Venus, P1) and PE (red, P2) signals, indicating close proximity between each pair of proteins. FACS analysis results reveal the formation of a complex between p53 and ARTS upon treatment with Etoposide.

Supplementary figure.4 Flow cytometry plots of BiFC assays show the percentage of cells expressing fluorescent YFP (Venus, Q1) and PE (red, Q4) signals, indicating close proximity between each pair of proteins. FACS analysis show that B3 disrupts the complex between XIAP and p53.

Supplementary figure 1



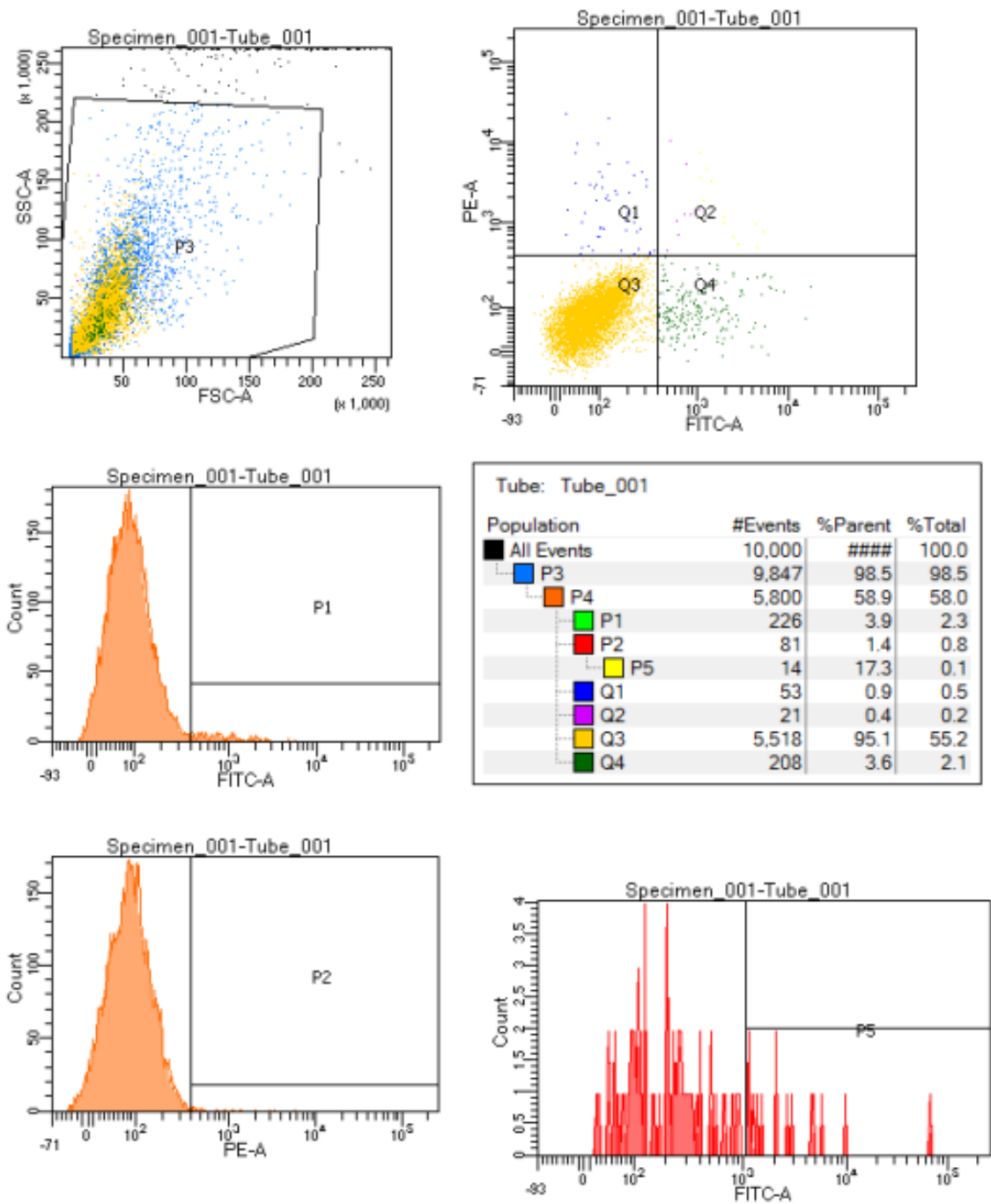
Supplementary figure 2



Supplementary figure 3

Repeat.1

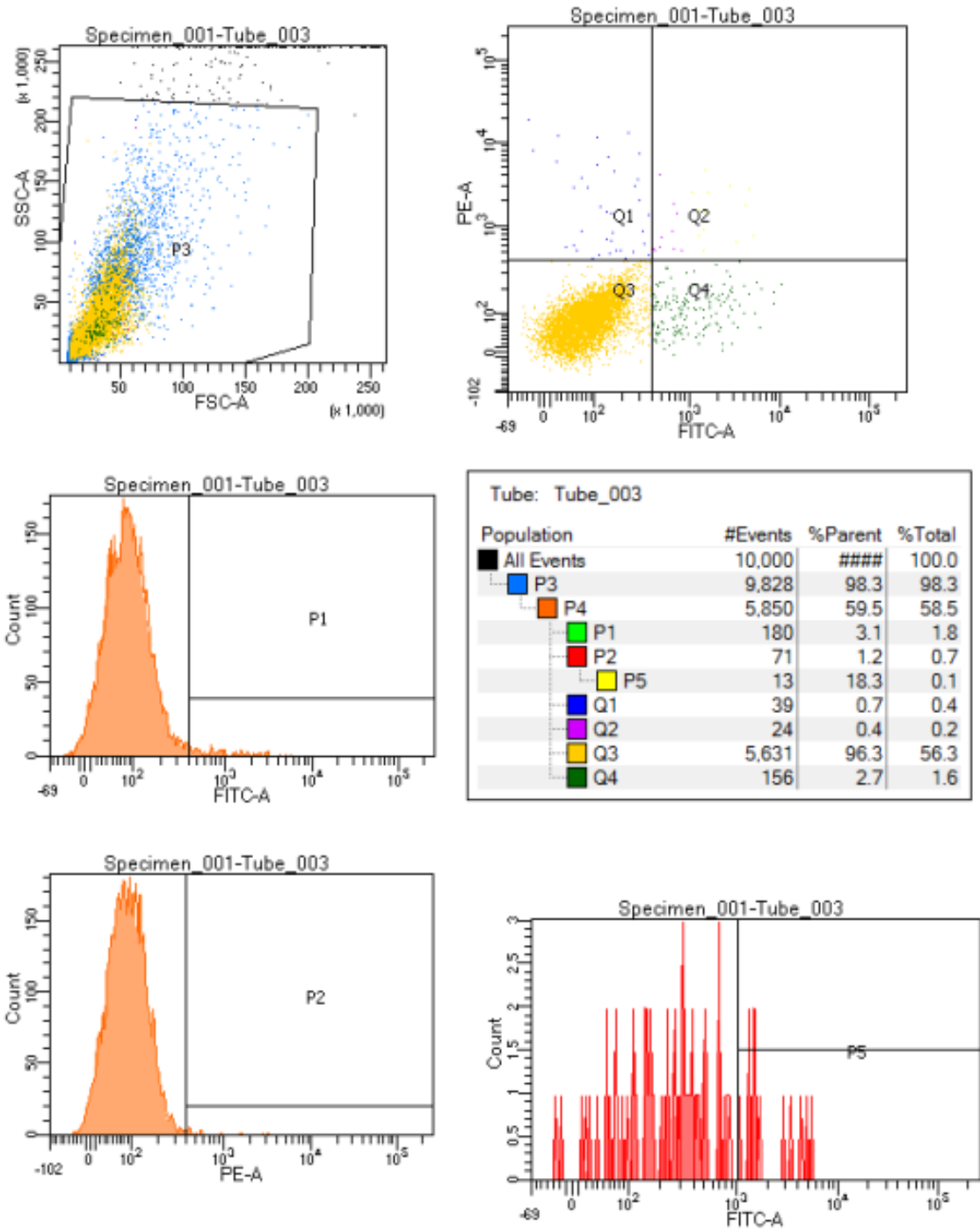
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

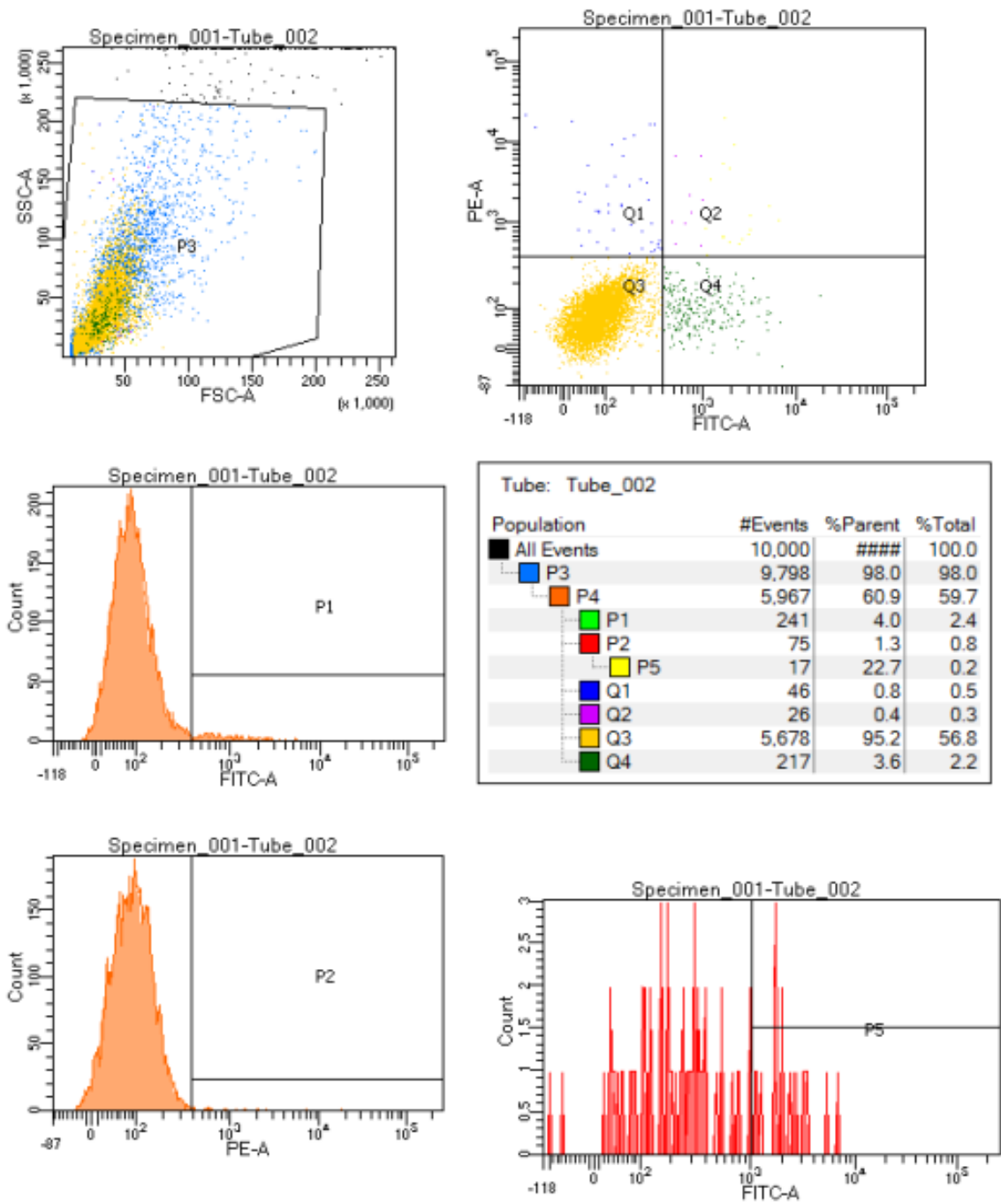
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

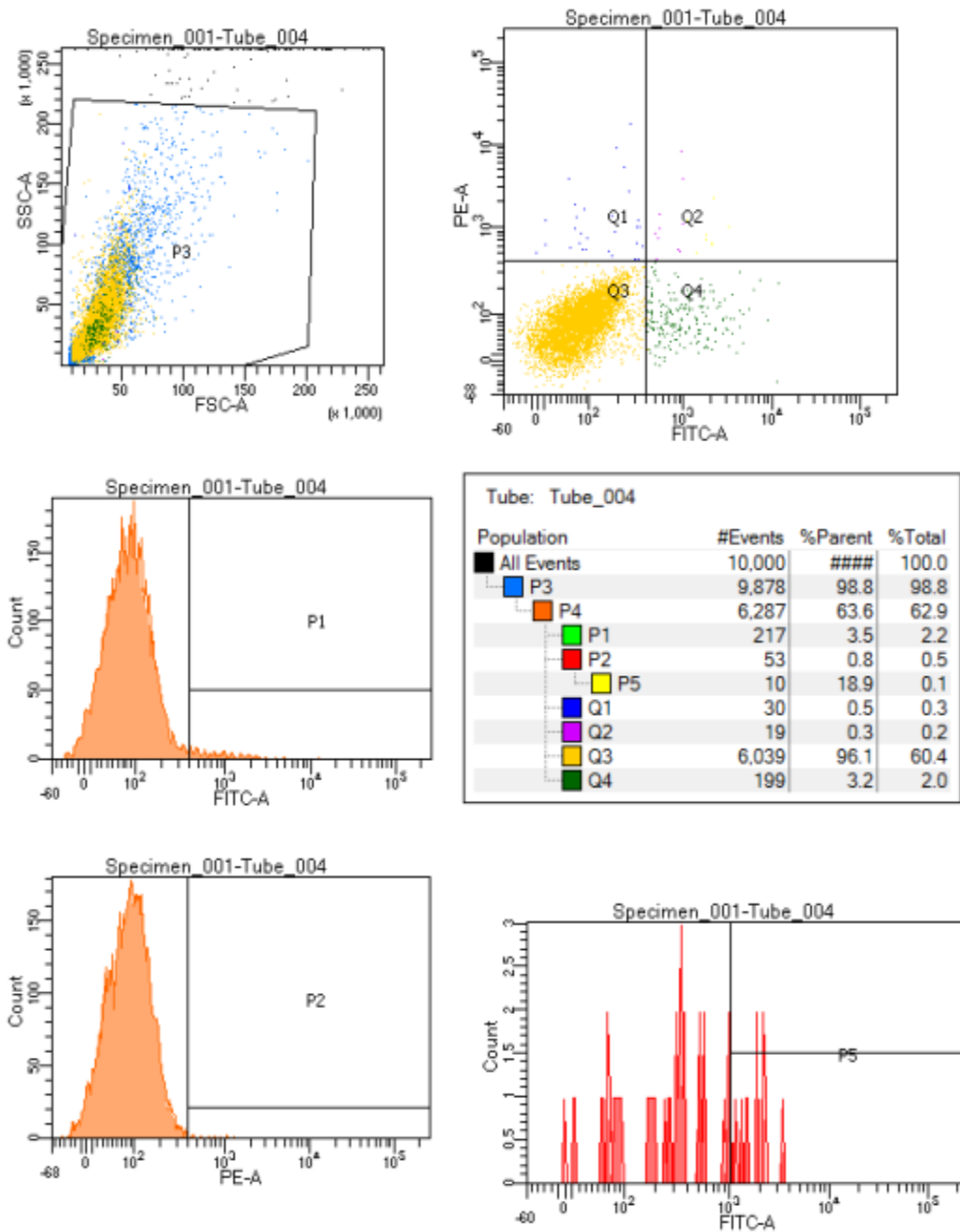
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

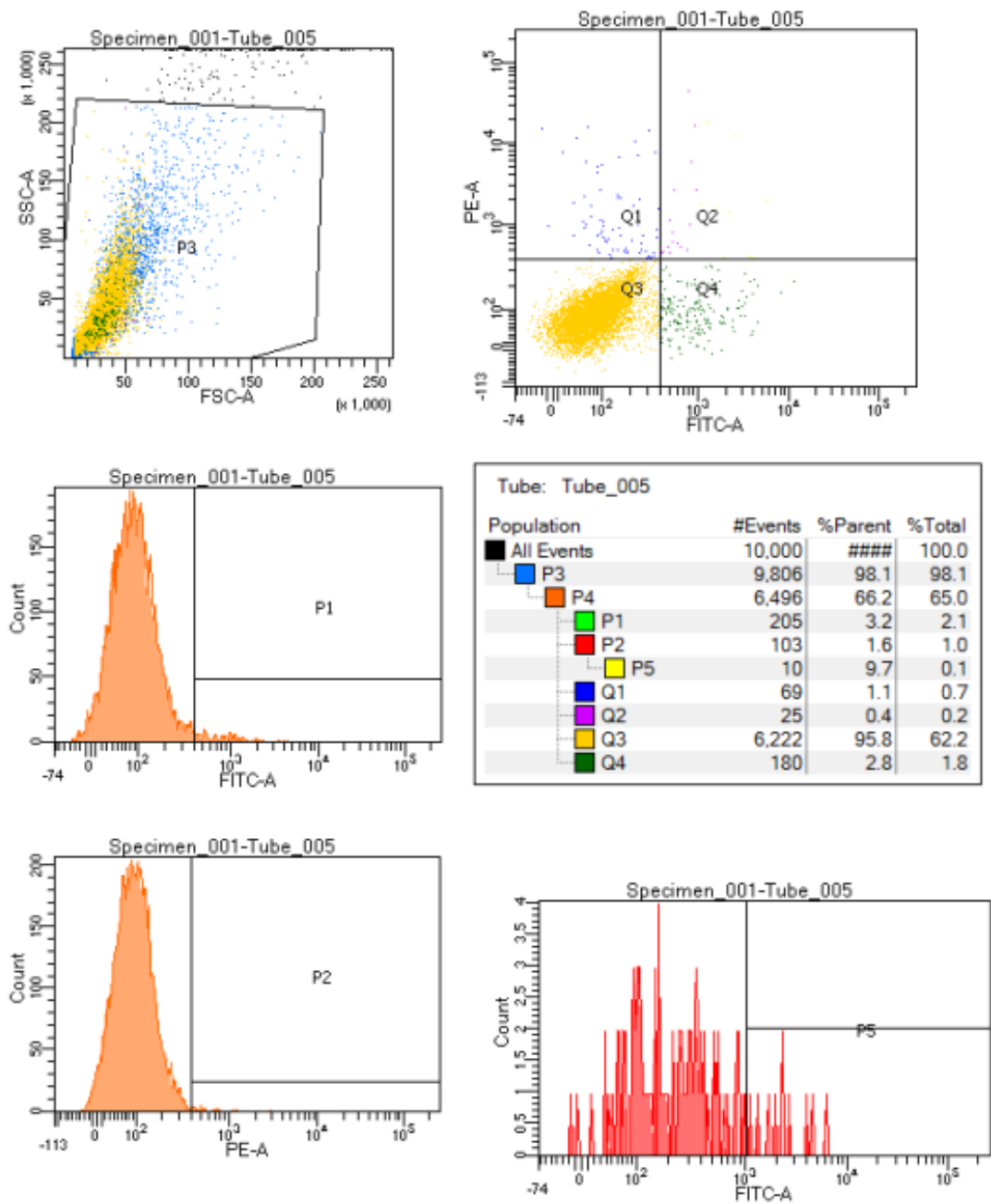
Etoposide 2hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

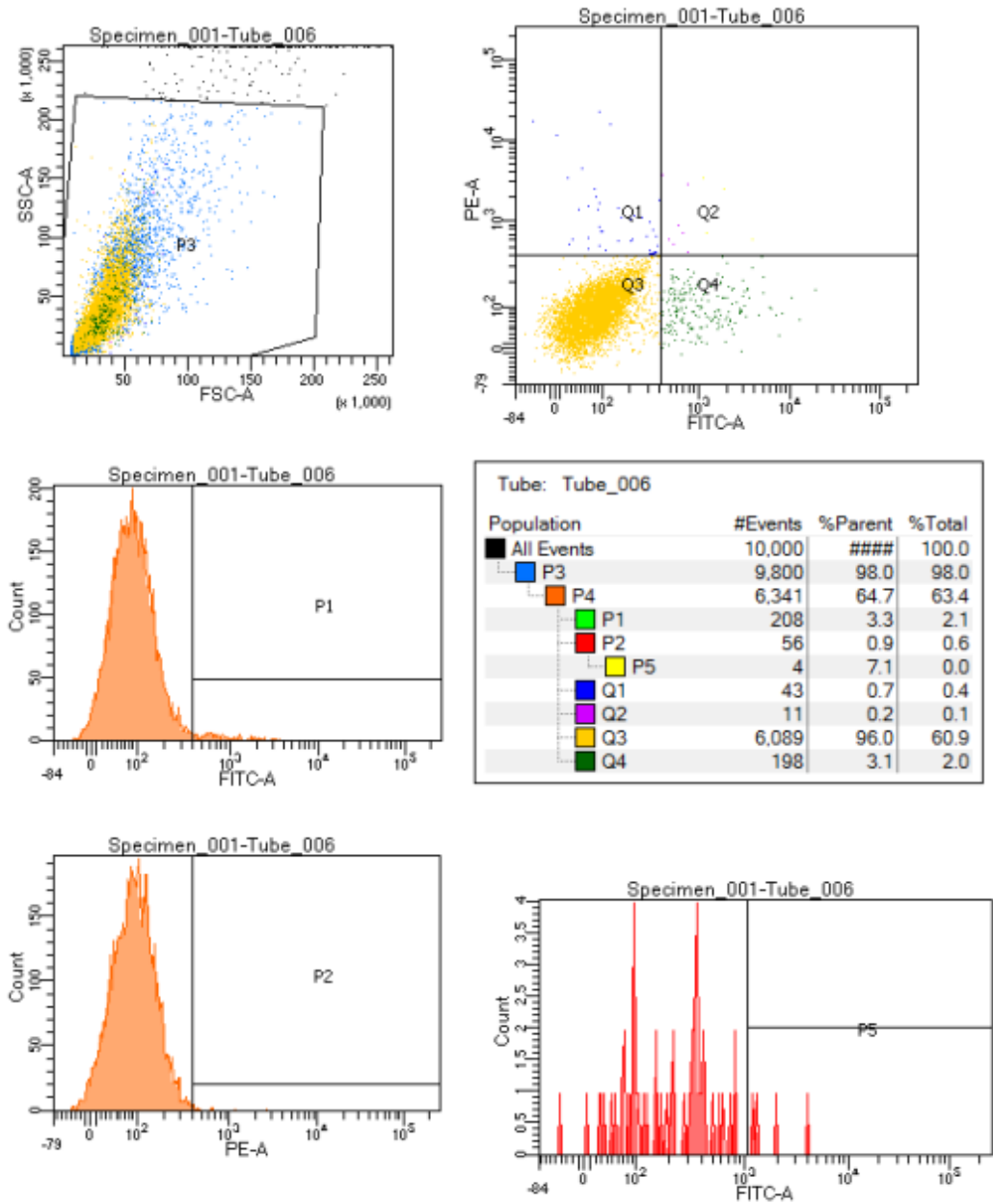
Etoposide 2hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

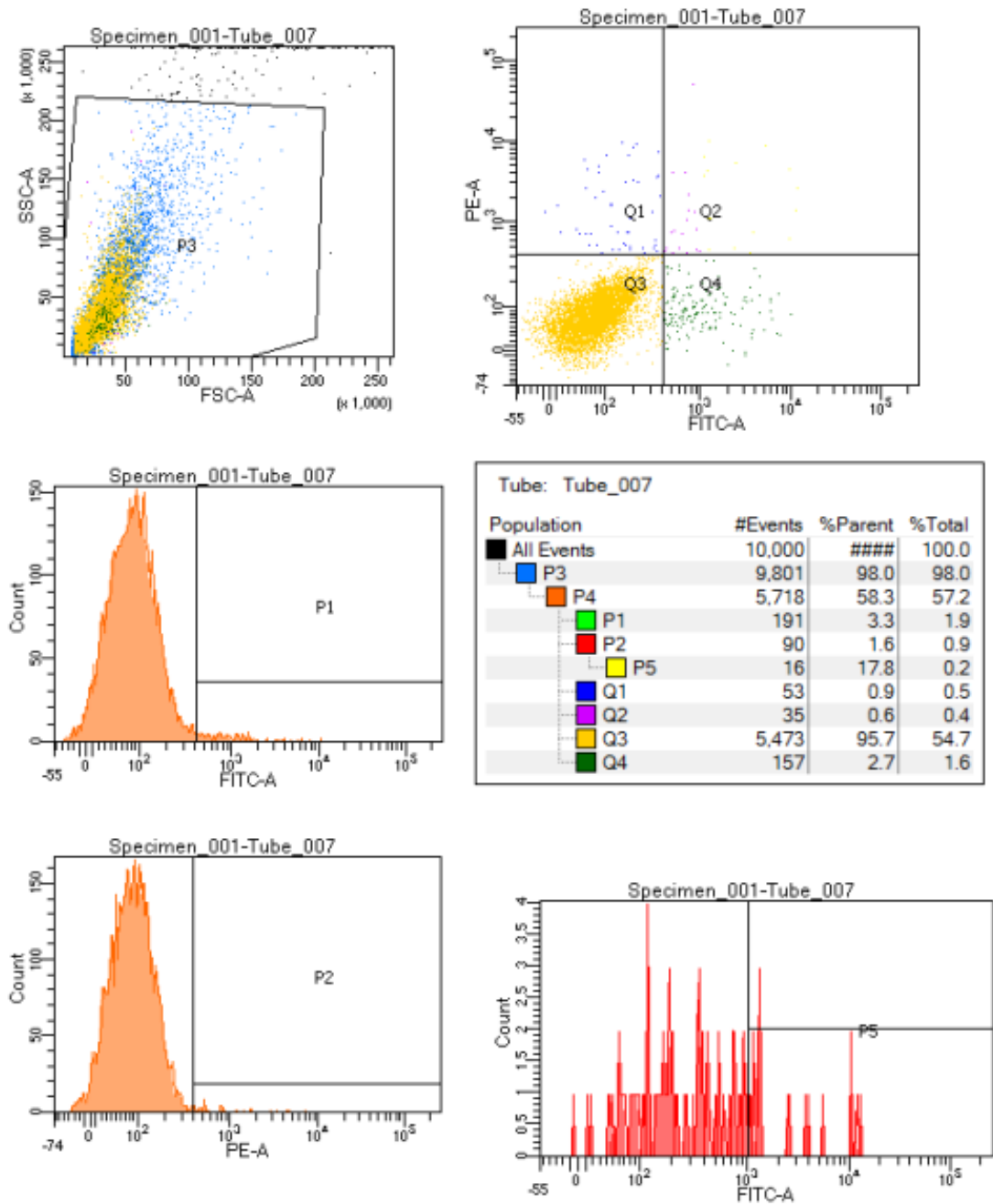
Etoposide 2hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

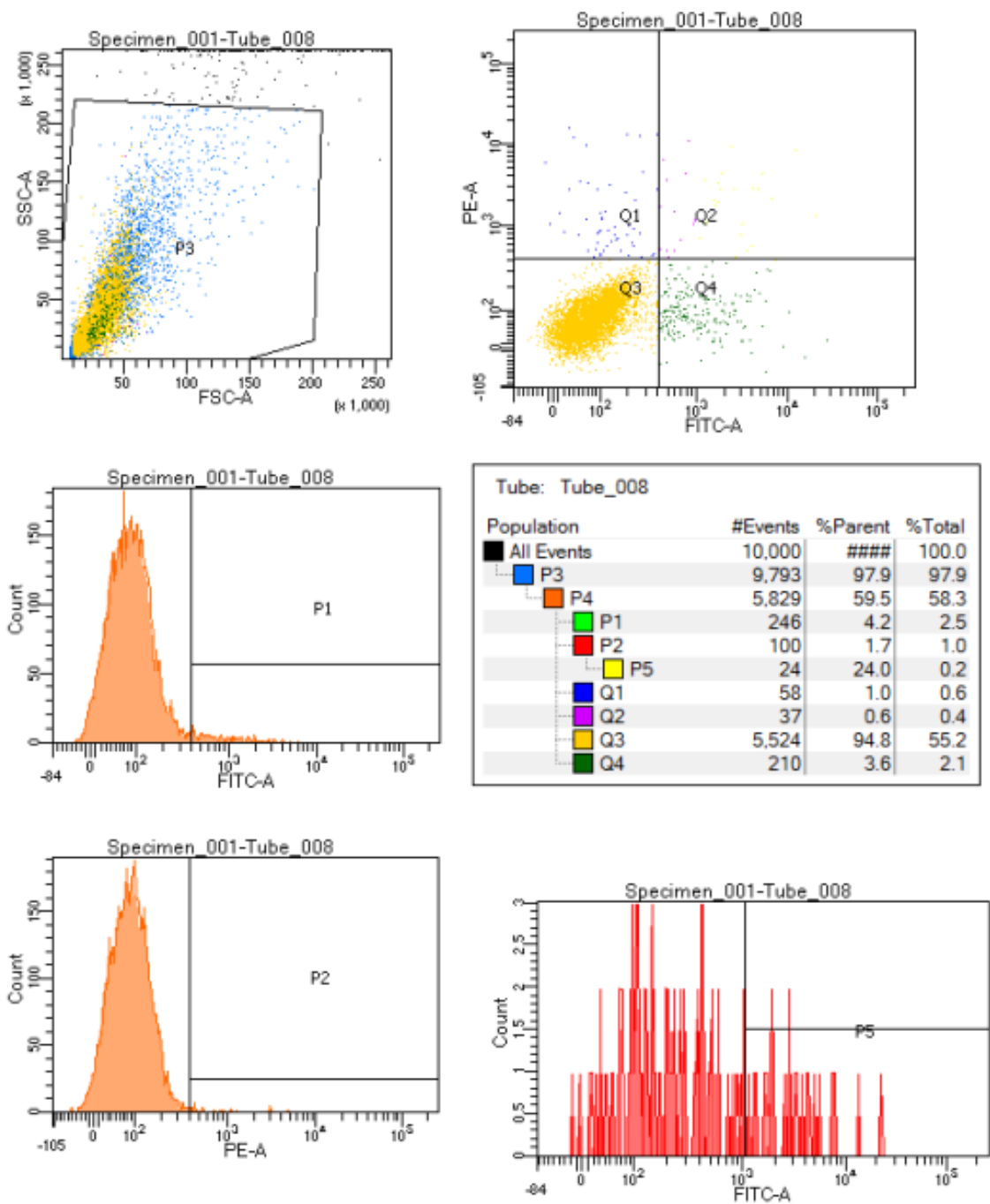
Etoposide 4hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

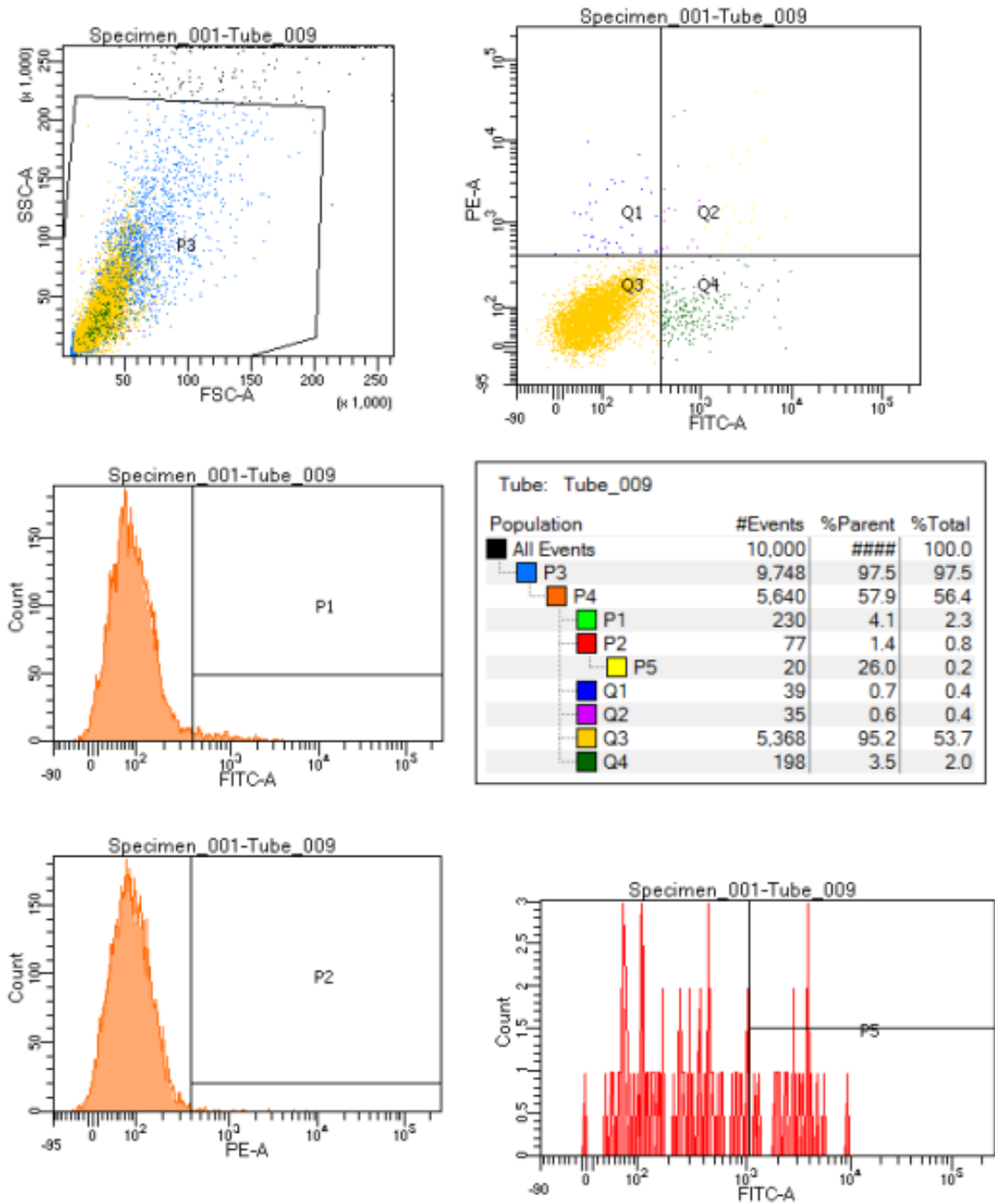
Etoposide 4hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

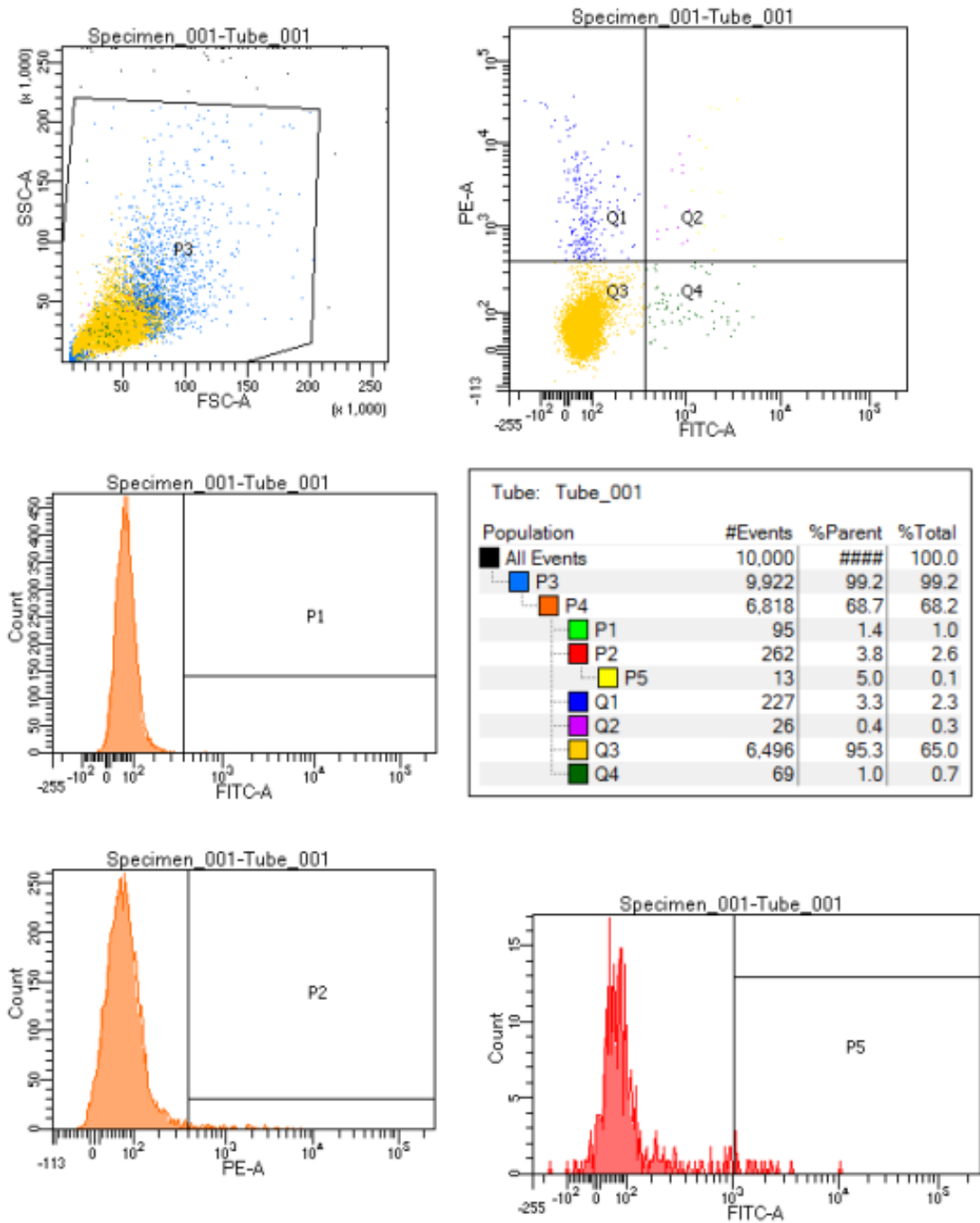
Etoposide 4hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

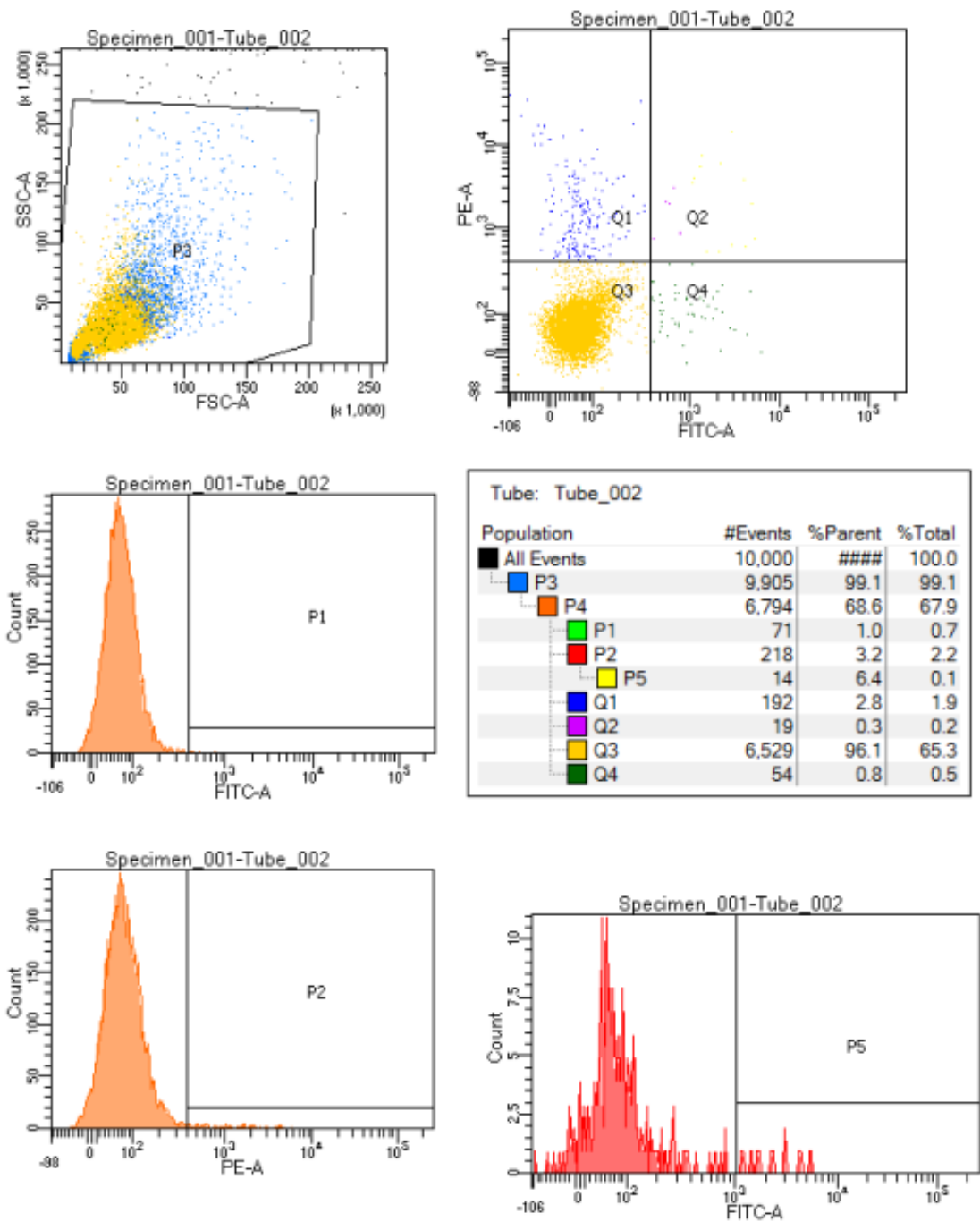
Control-DMSO 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

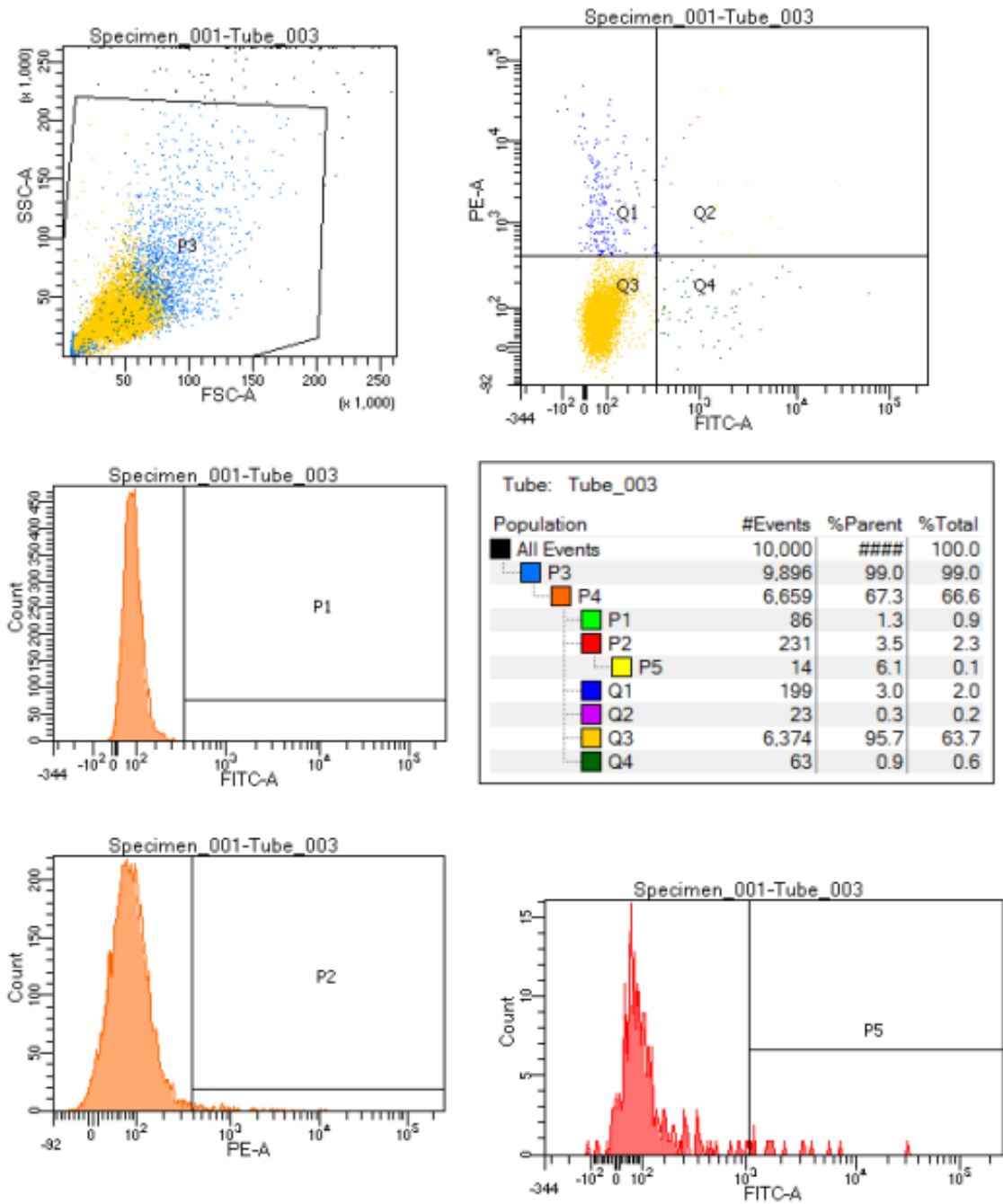
Control-DMSO 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

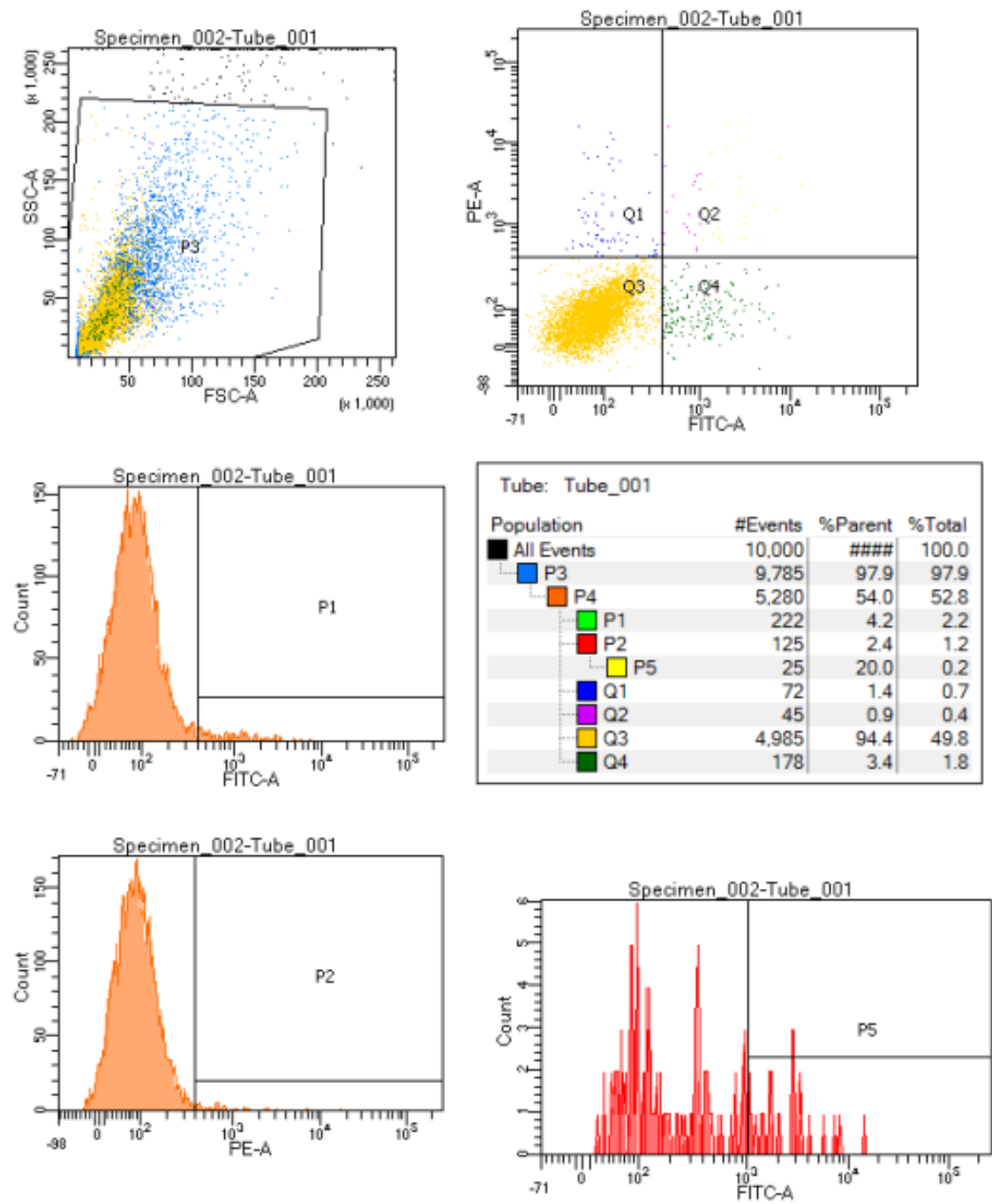
Control-DMSO 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

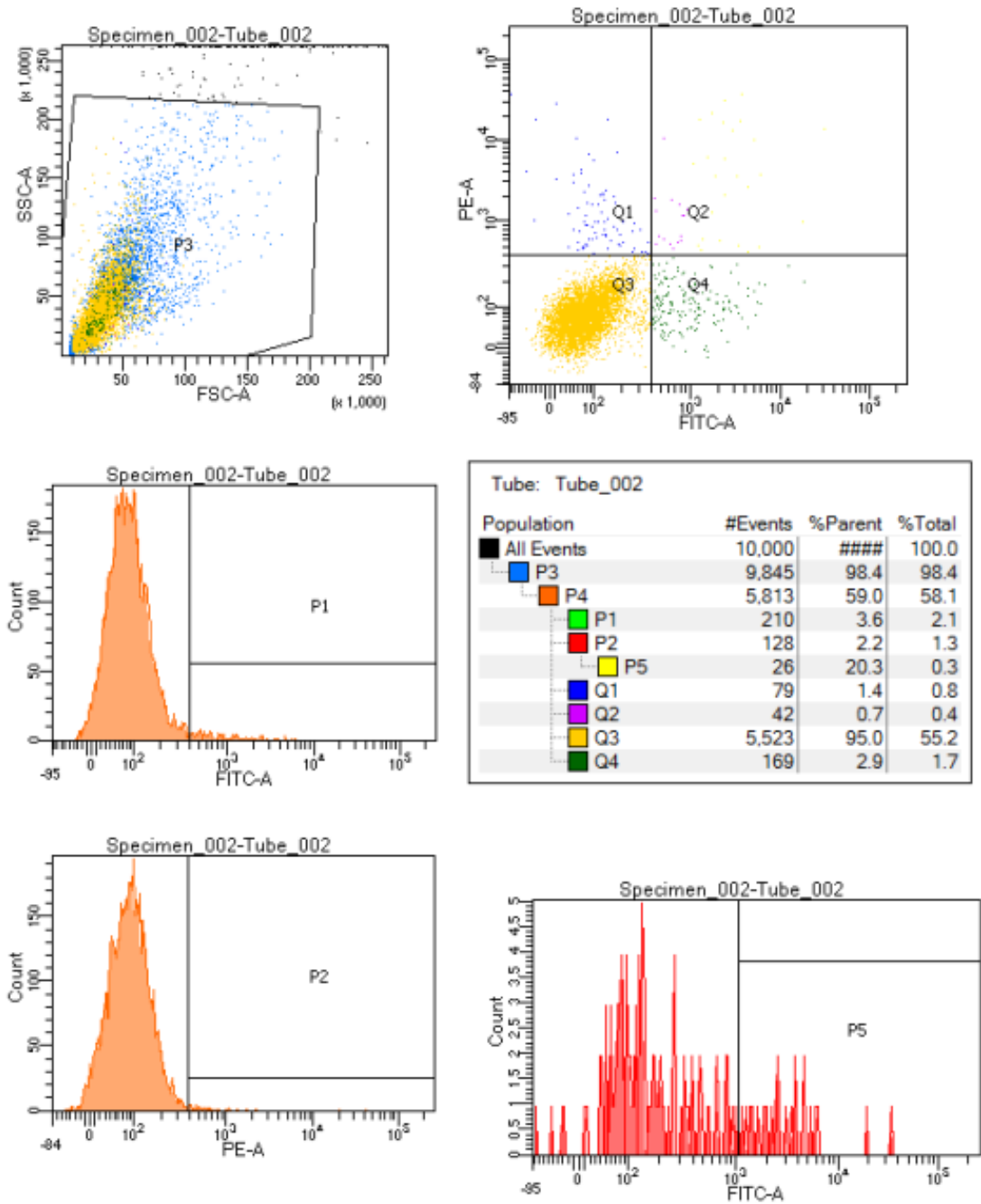
Etoposide 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

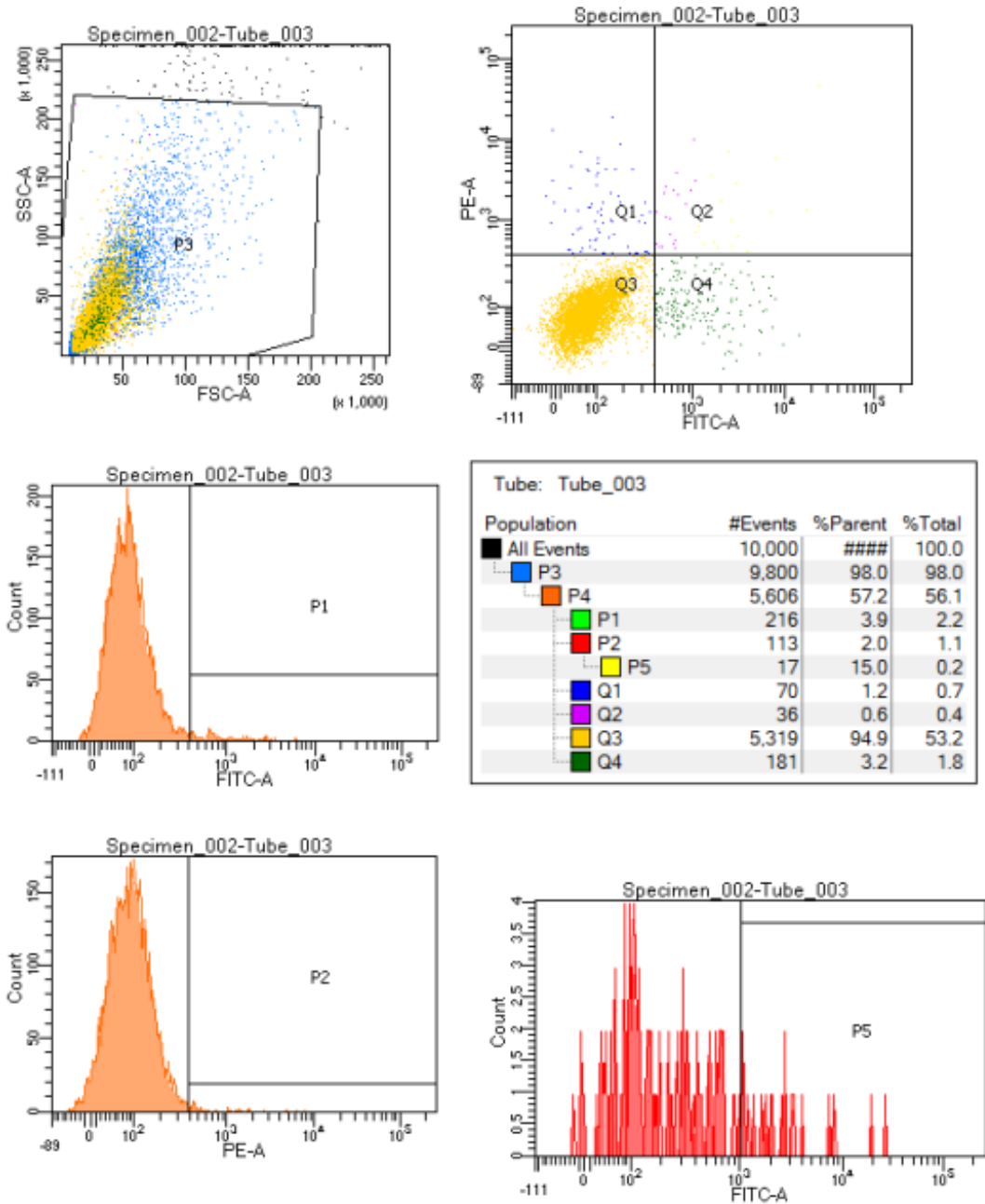
Etoposide 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

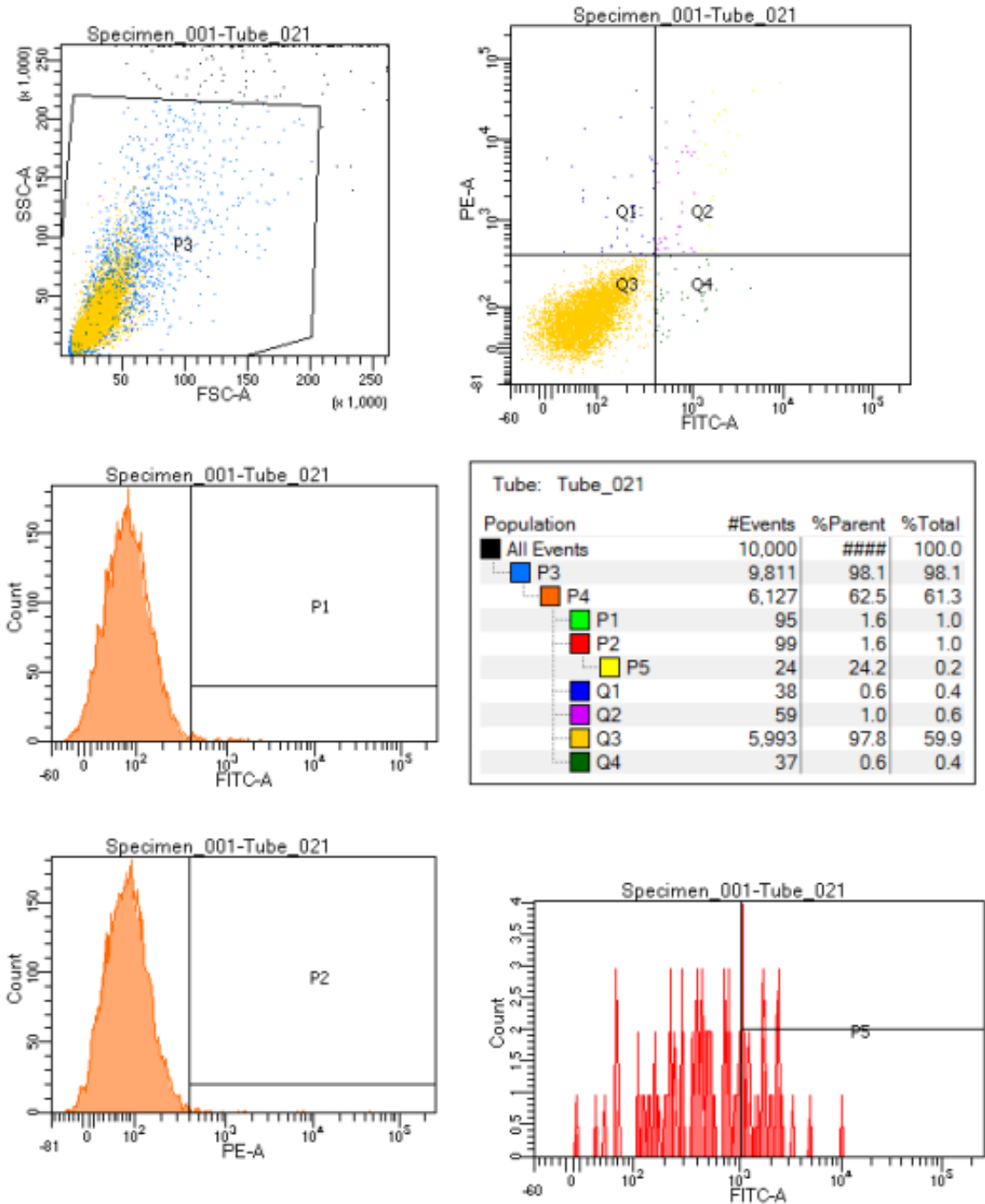
Etoposide 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

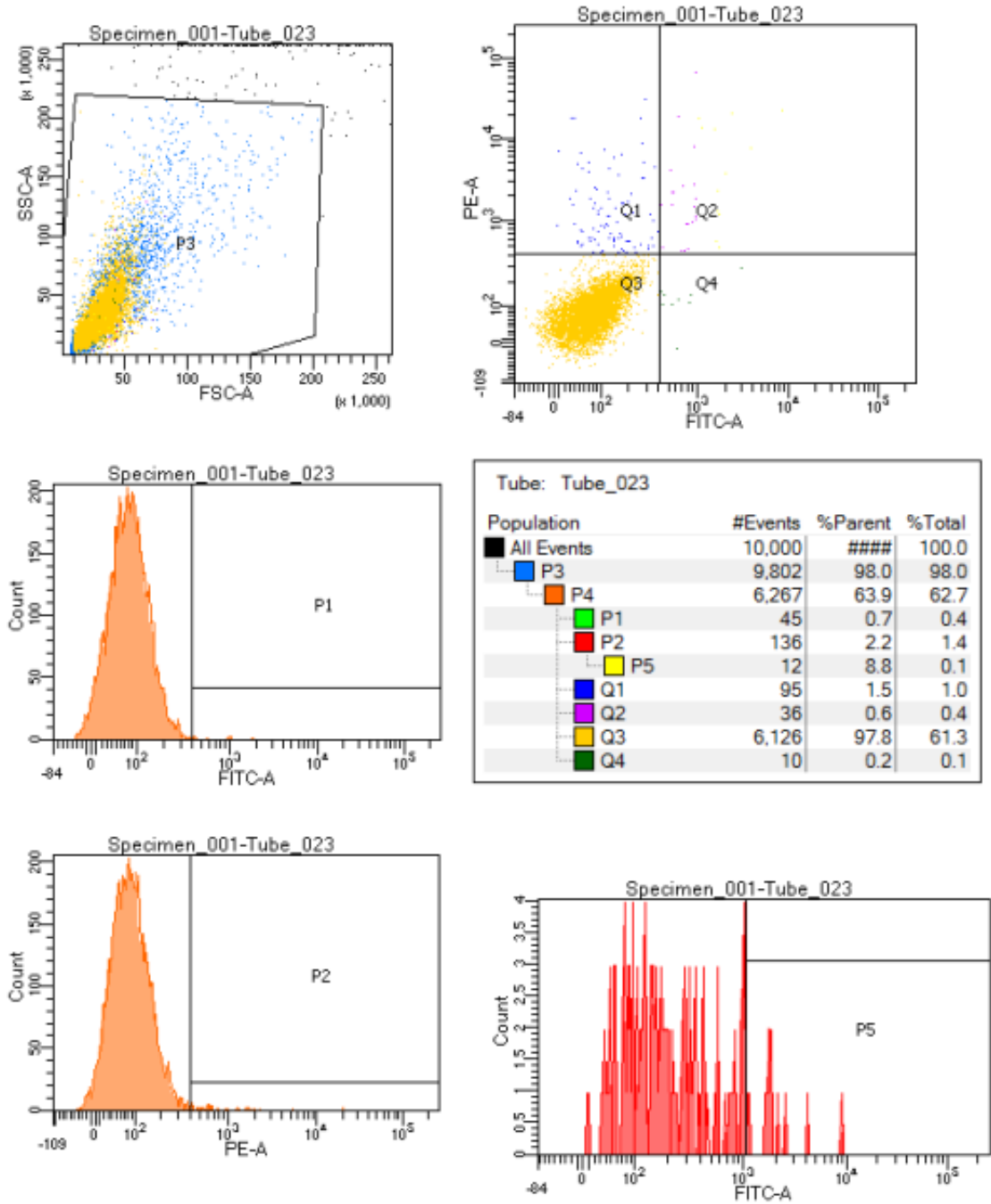
Positive Control
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.1

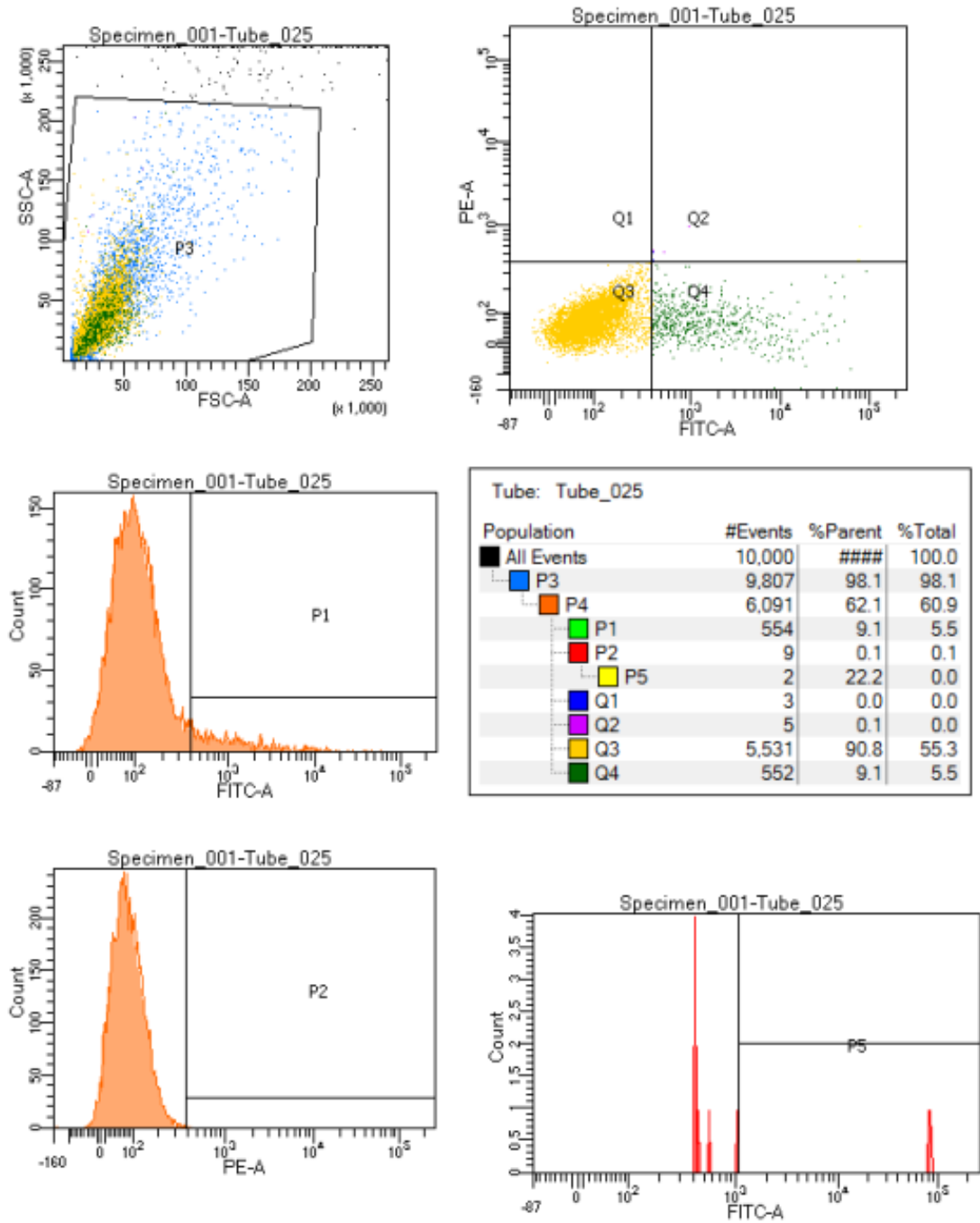
Negative control
BD FACSDiva 8.0.1



Supplementary figure 3

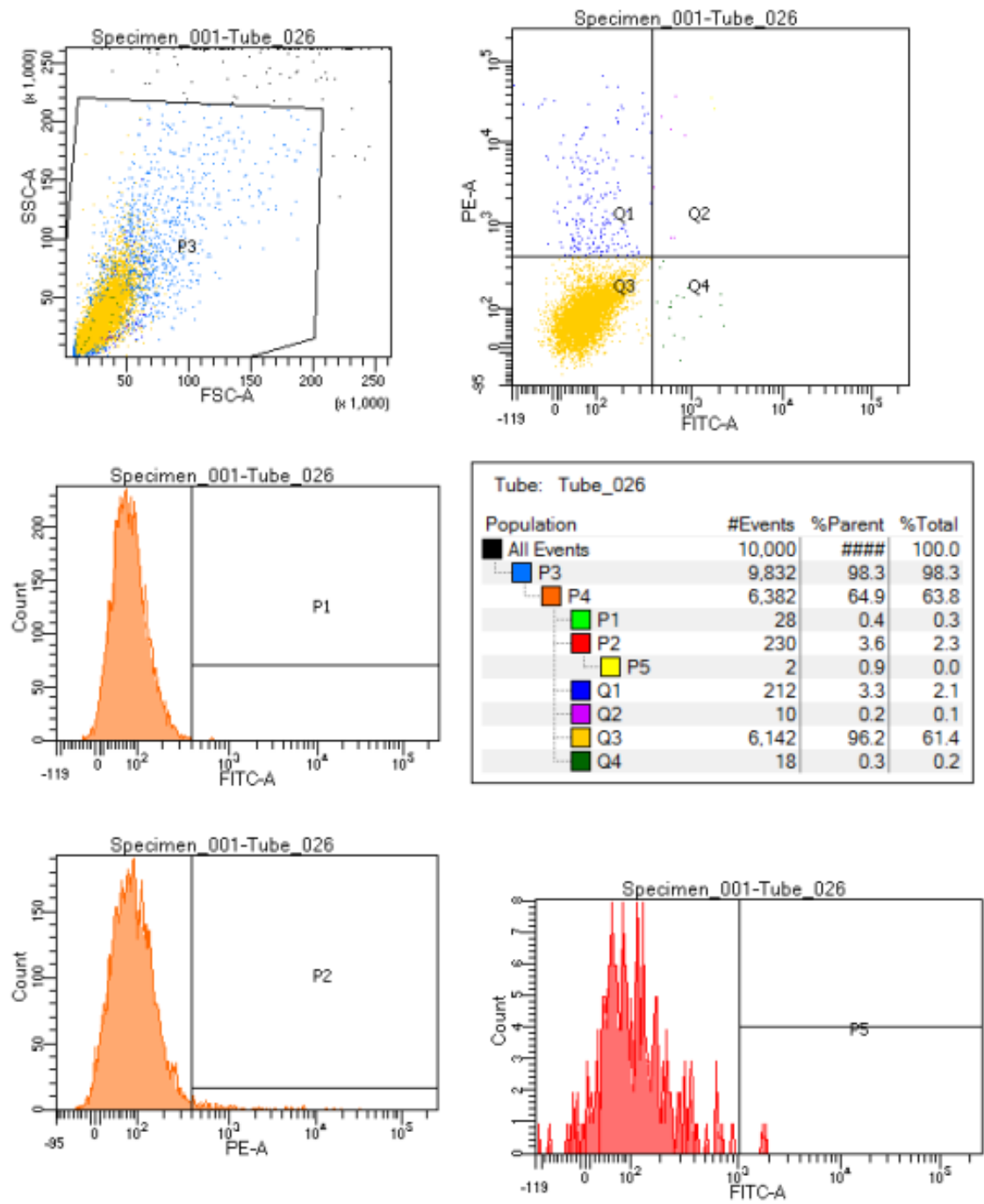
Repeat.1

Yellow alone
BD FACSDiva 8.0.1



Supplementary figure 3

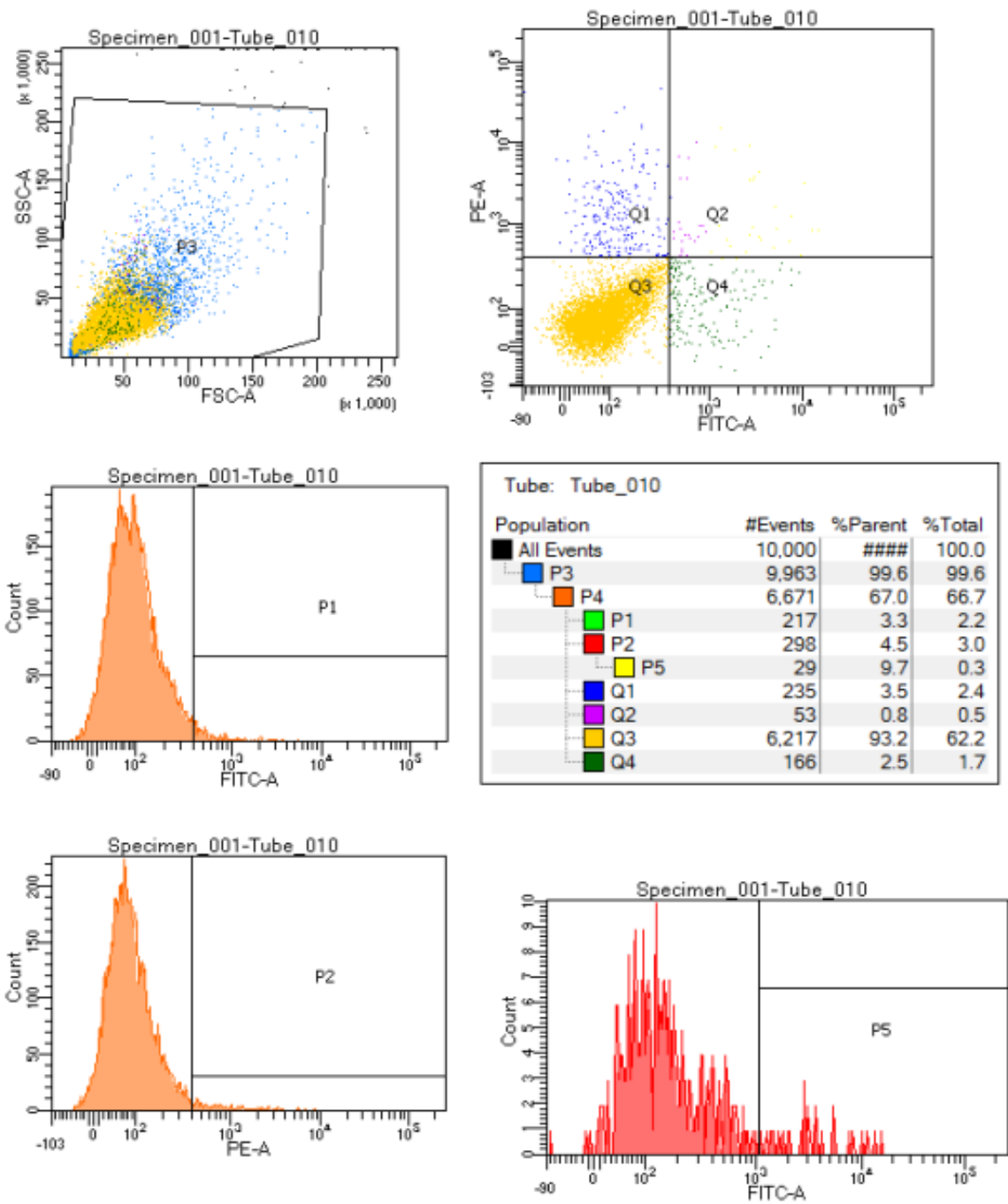
Repeat.1
Red alone
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

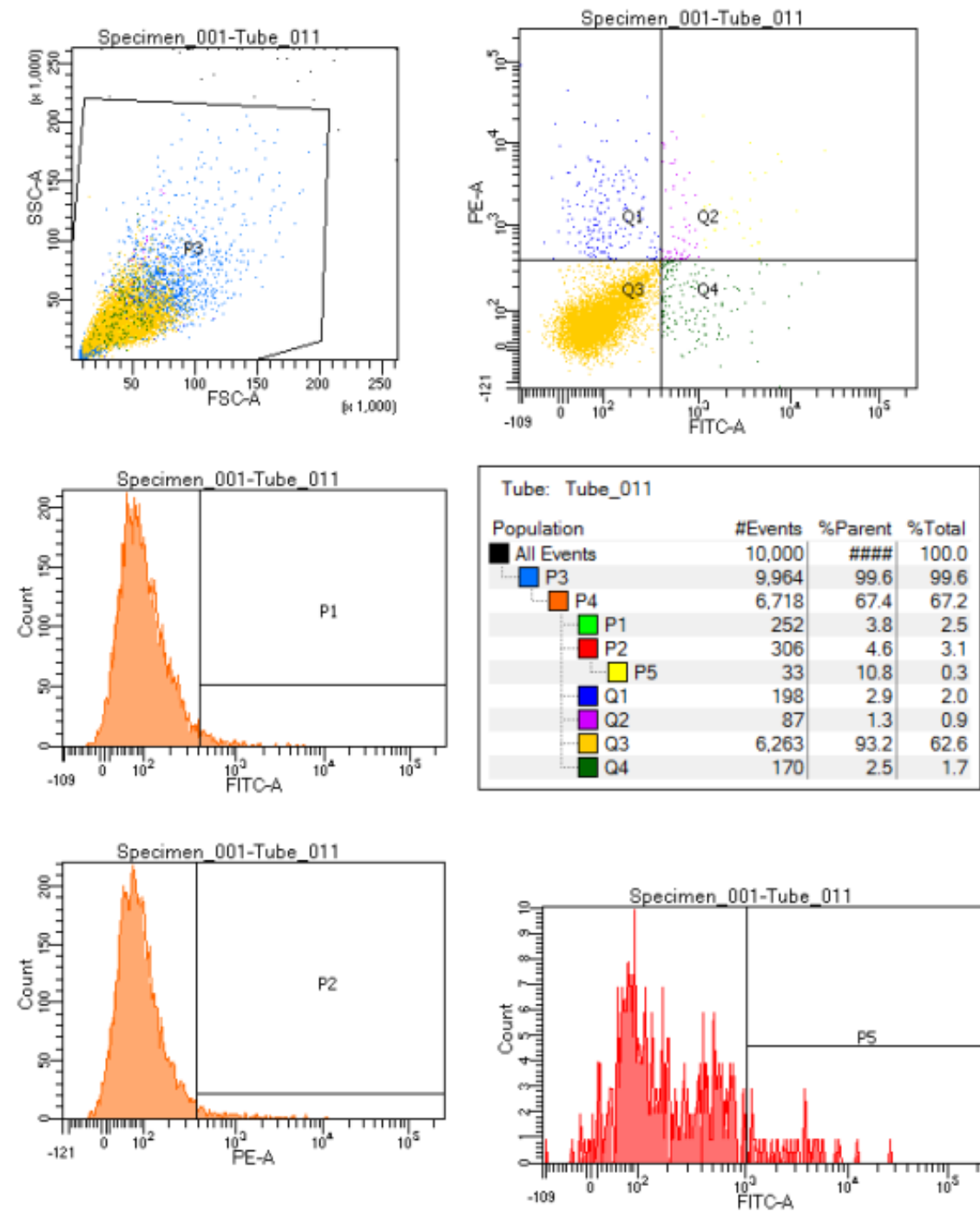
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

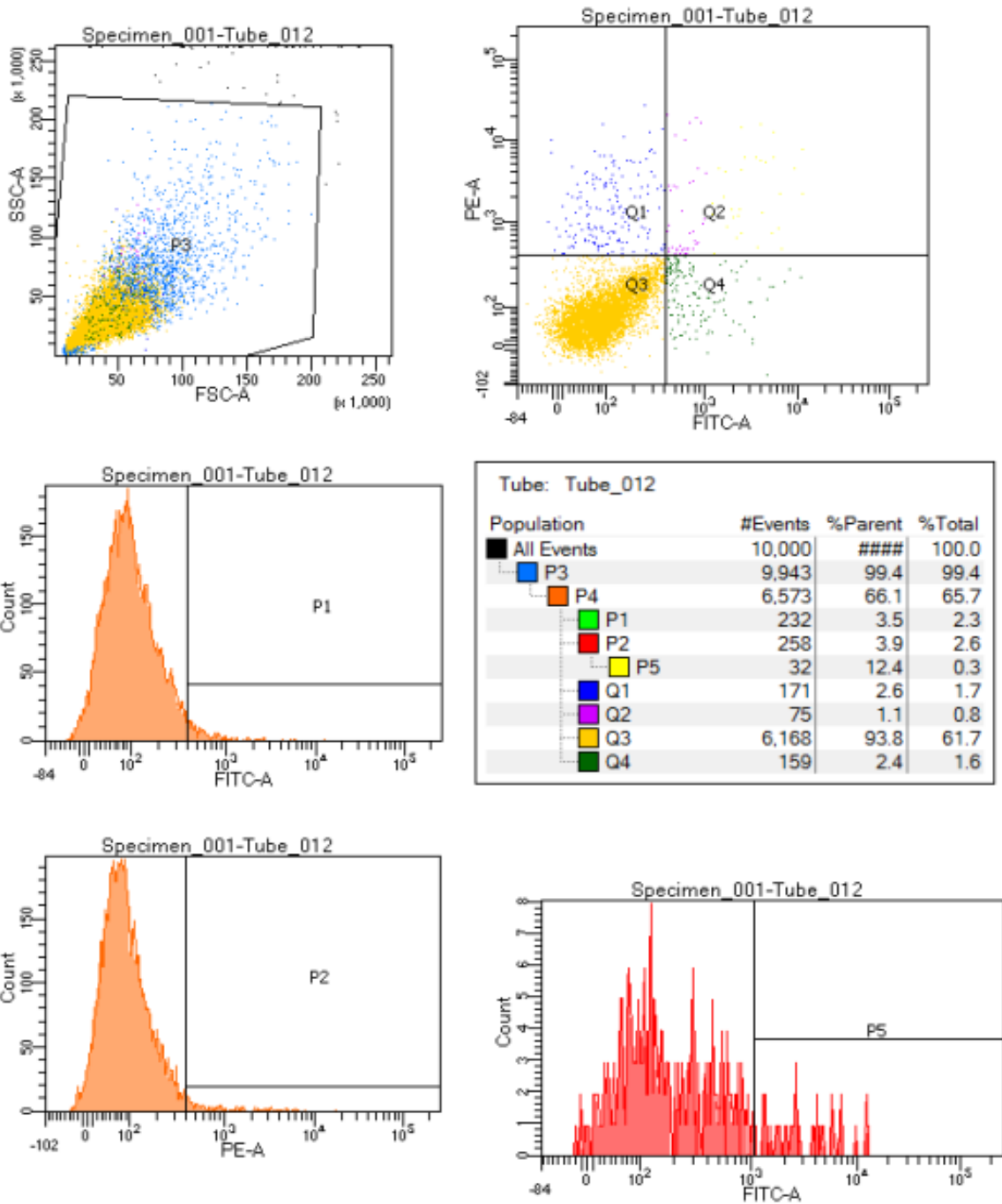
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

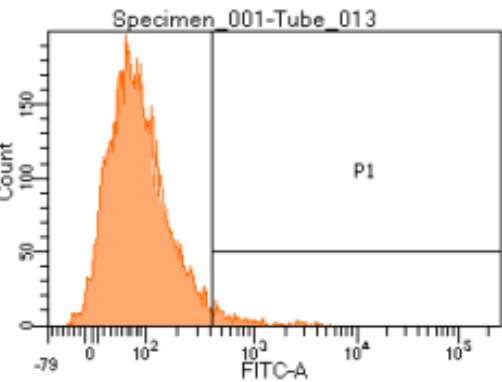
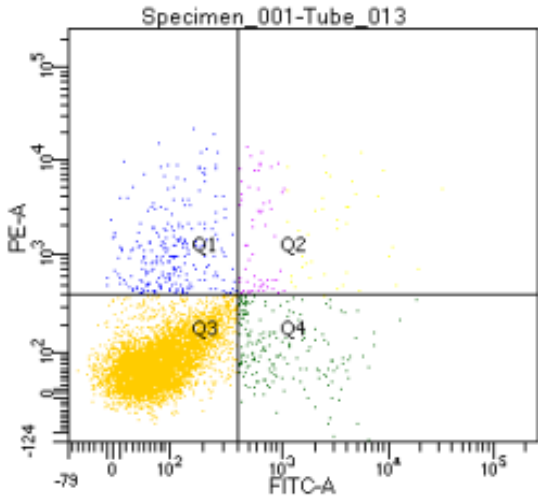
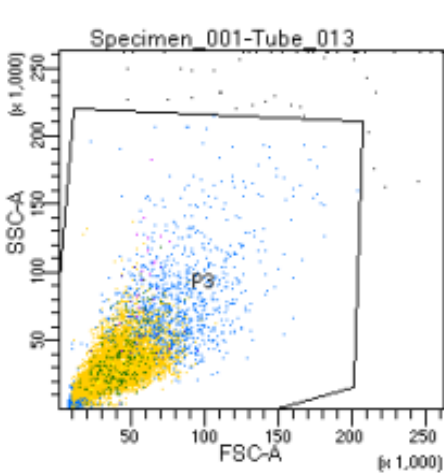
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 3

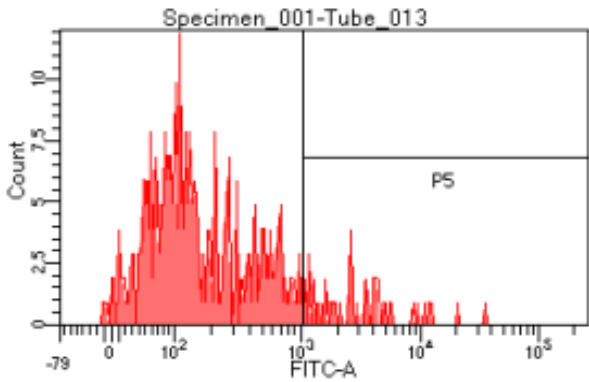
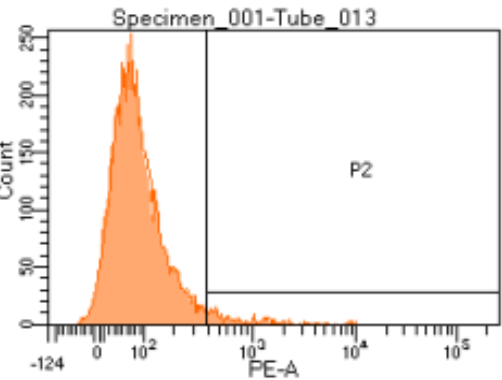
Repeat.2

Etoposide 2hrs
BD FACSDiva 8.0.1



Tube: Tube_013

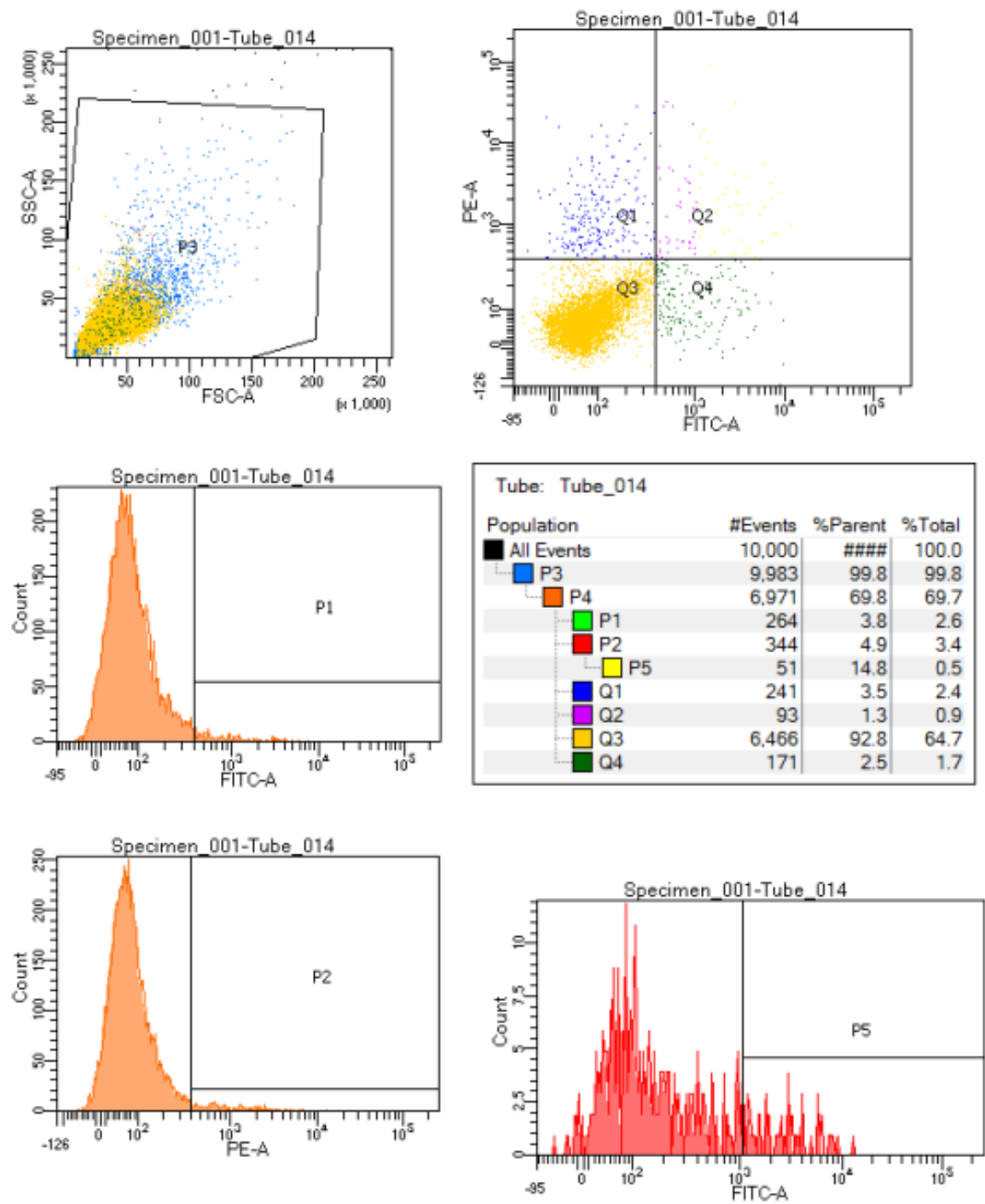
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All Events	10,000	###	100.0
P3	9,949	99.5	99.5
P4	7,005	70.4	70.0
P1	297	4.2	3.0
P2	372	5.3	3.7
P5	42	11.3	0.4
Q1	251	3.6	2.5
Q2	99	1.4	1.0
Q3	6,456	92.2	64.6
Q4	199	2.8	2.0



Supplementary figure 3

Repeat.2

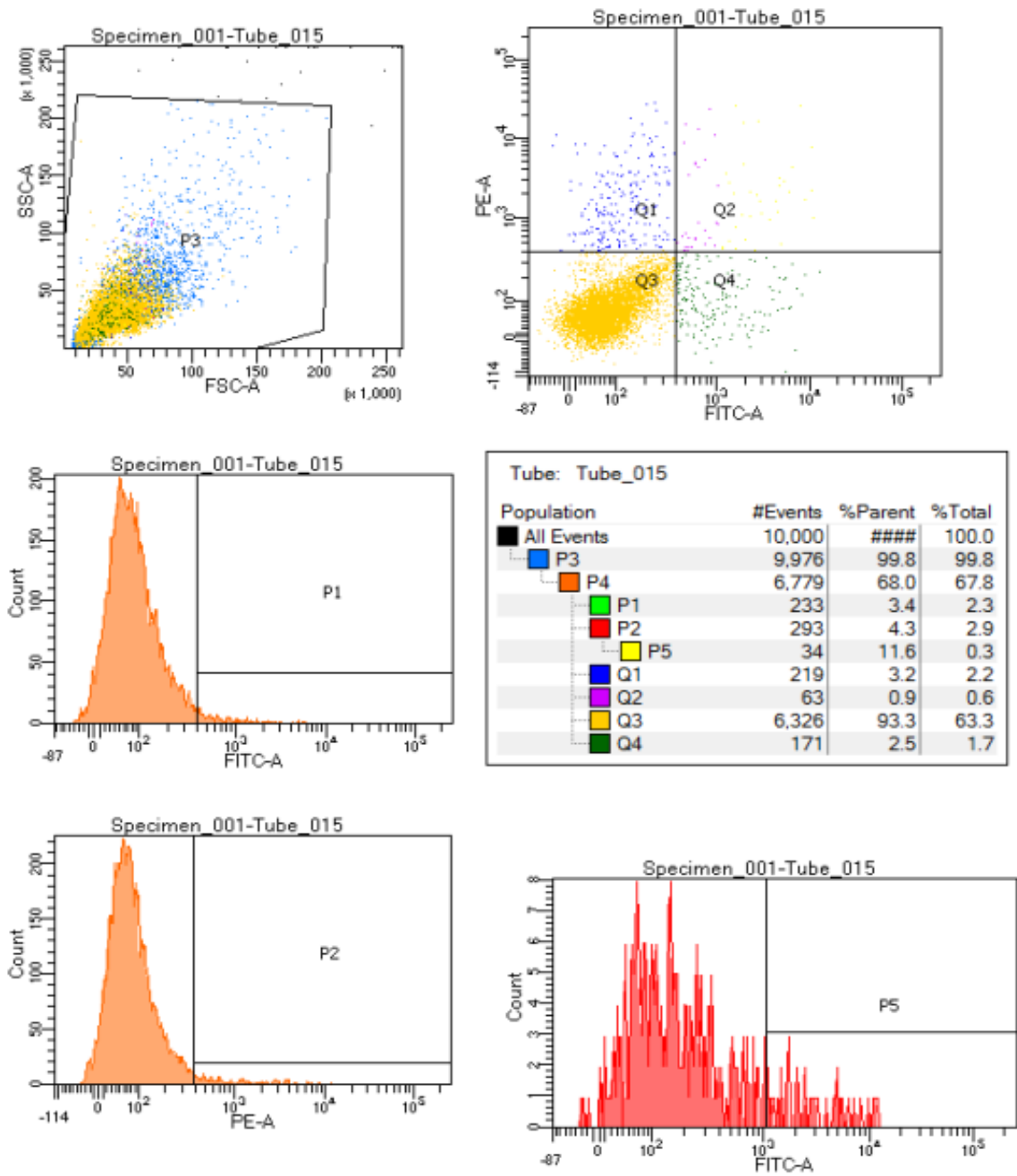
Etoposide 2hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

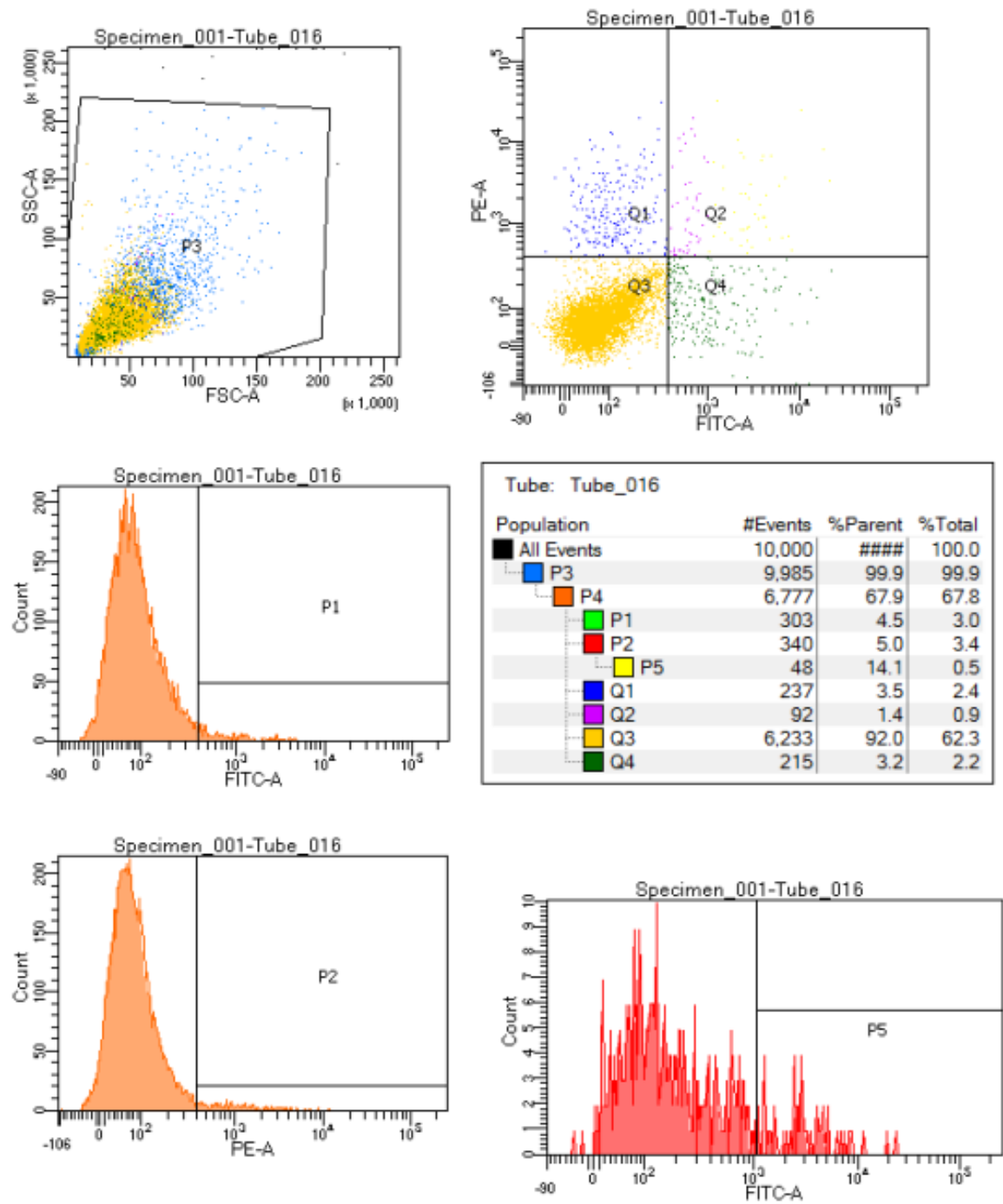
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BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

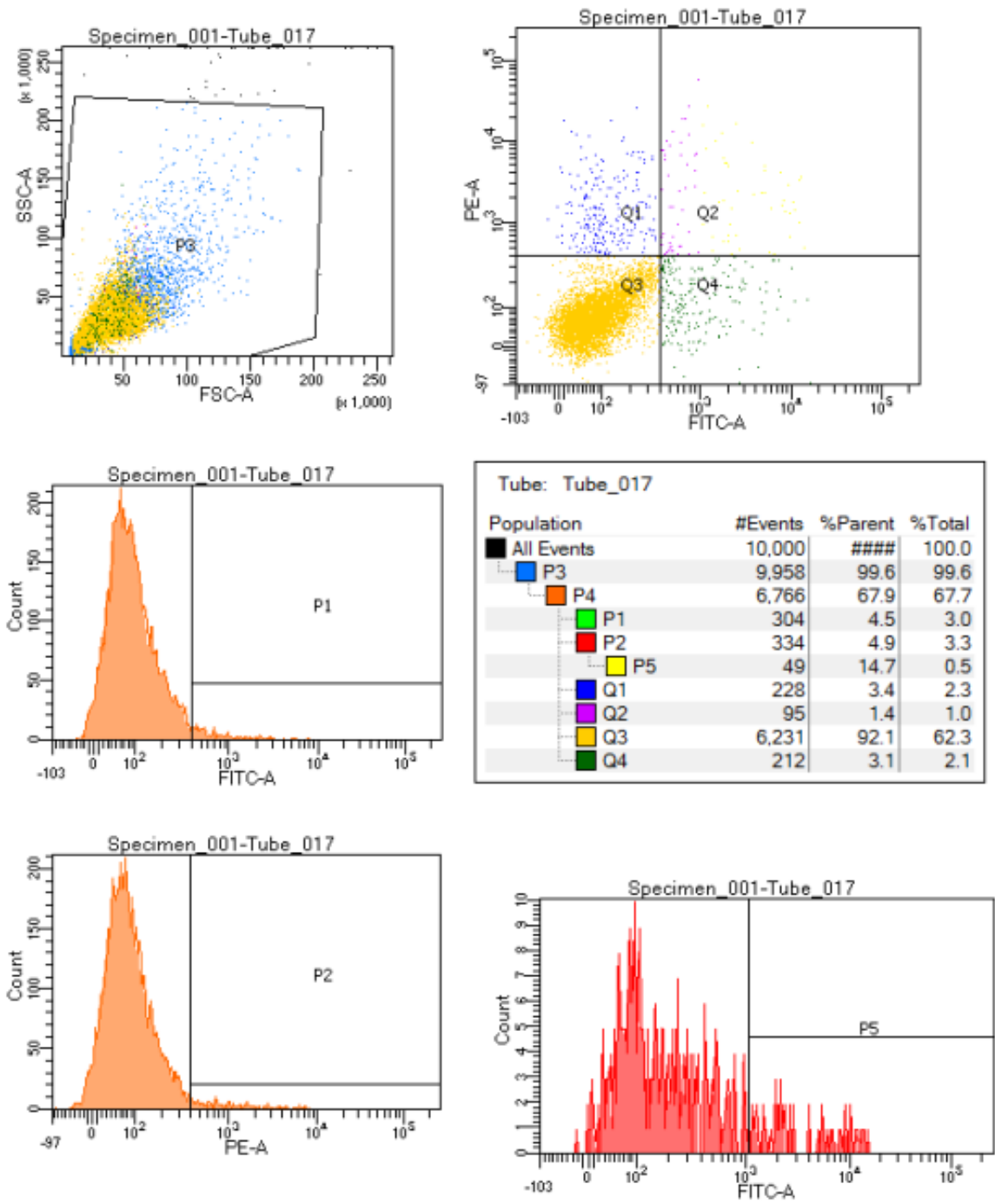
Etoposide 4hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

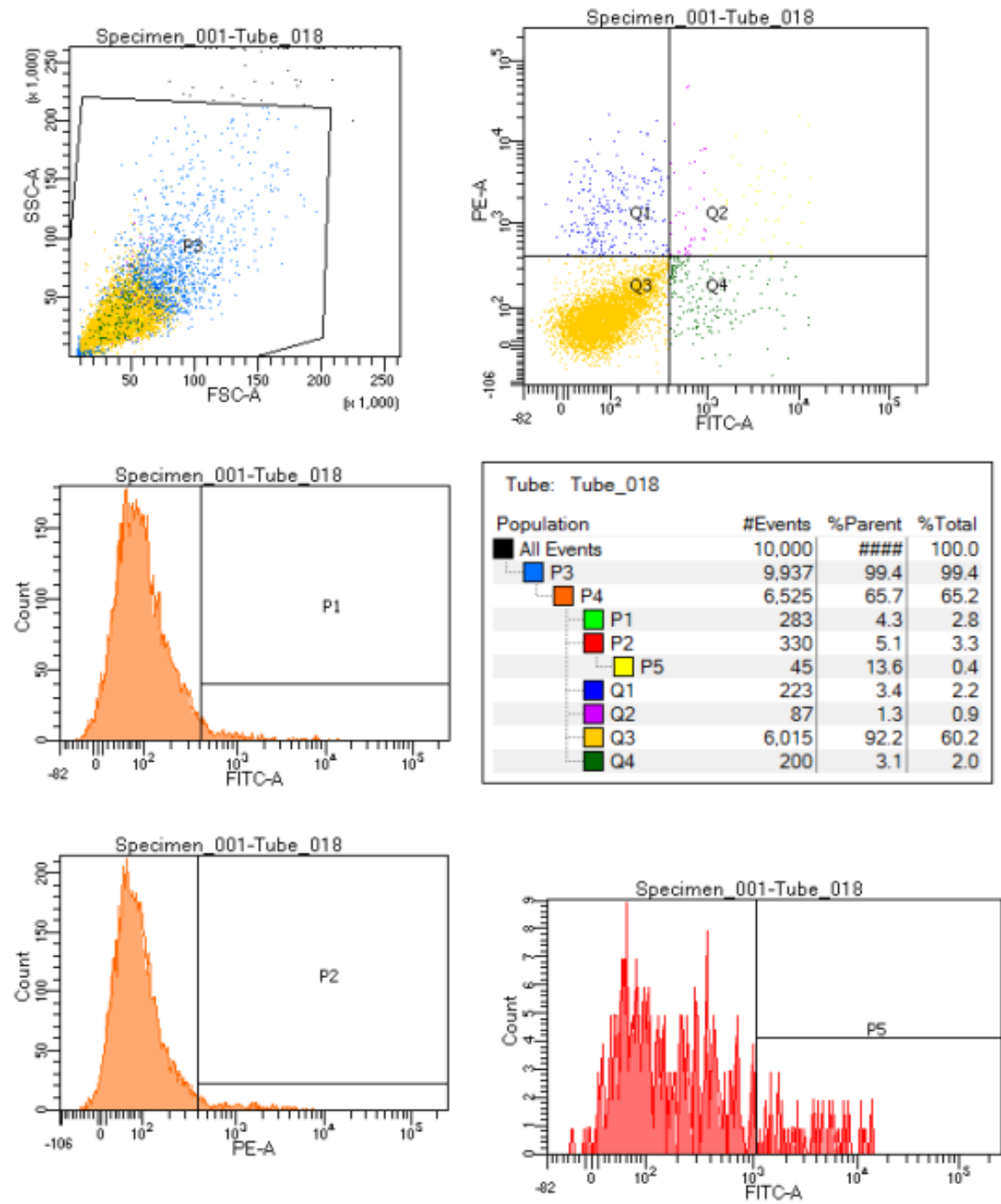
Etoposide 4hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

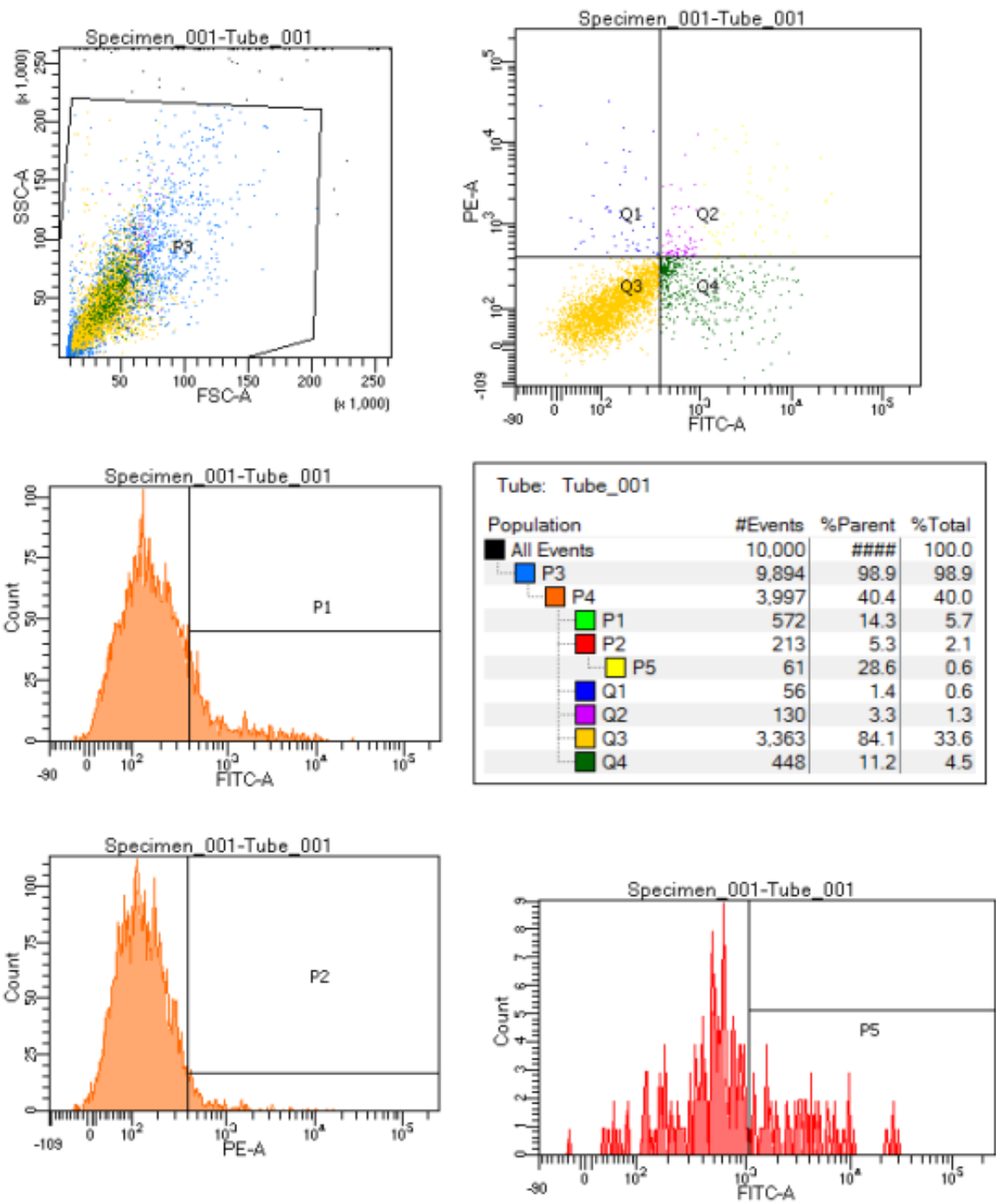
Etoposide 4hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

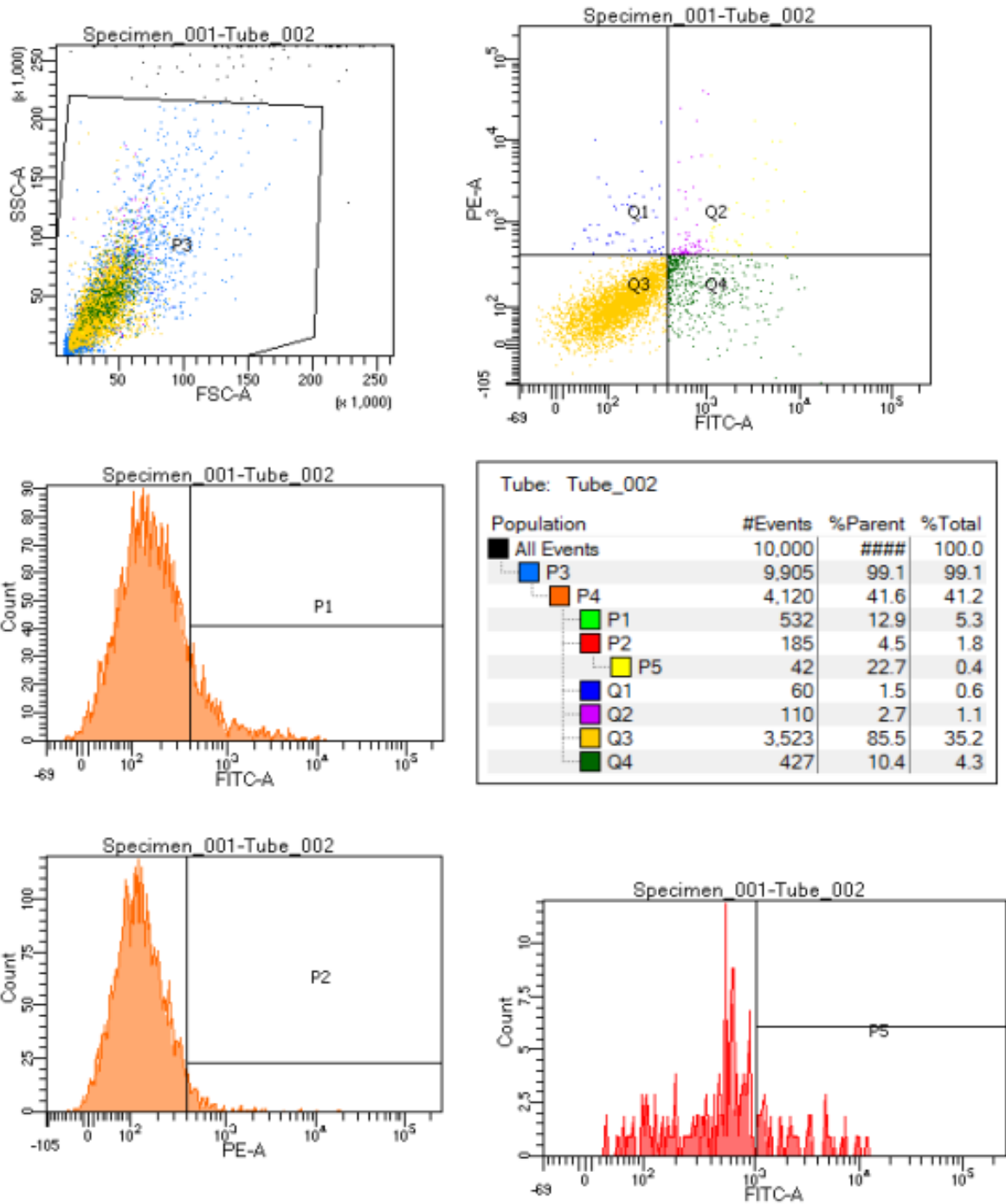
Etoposide 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

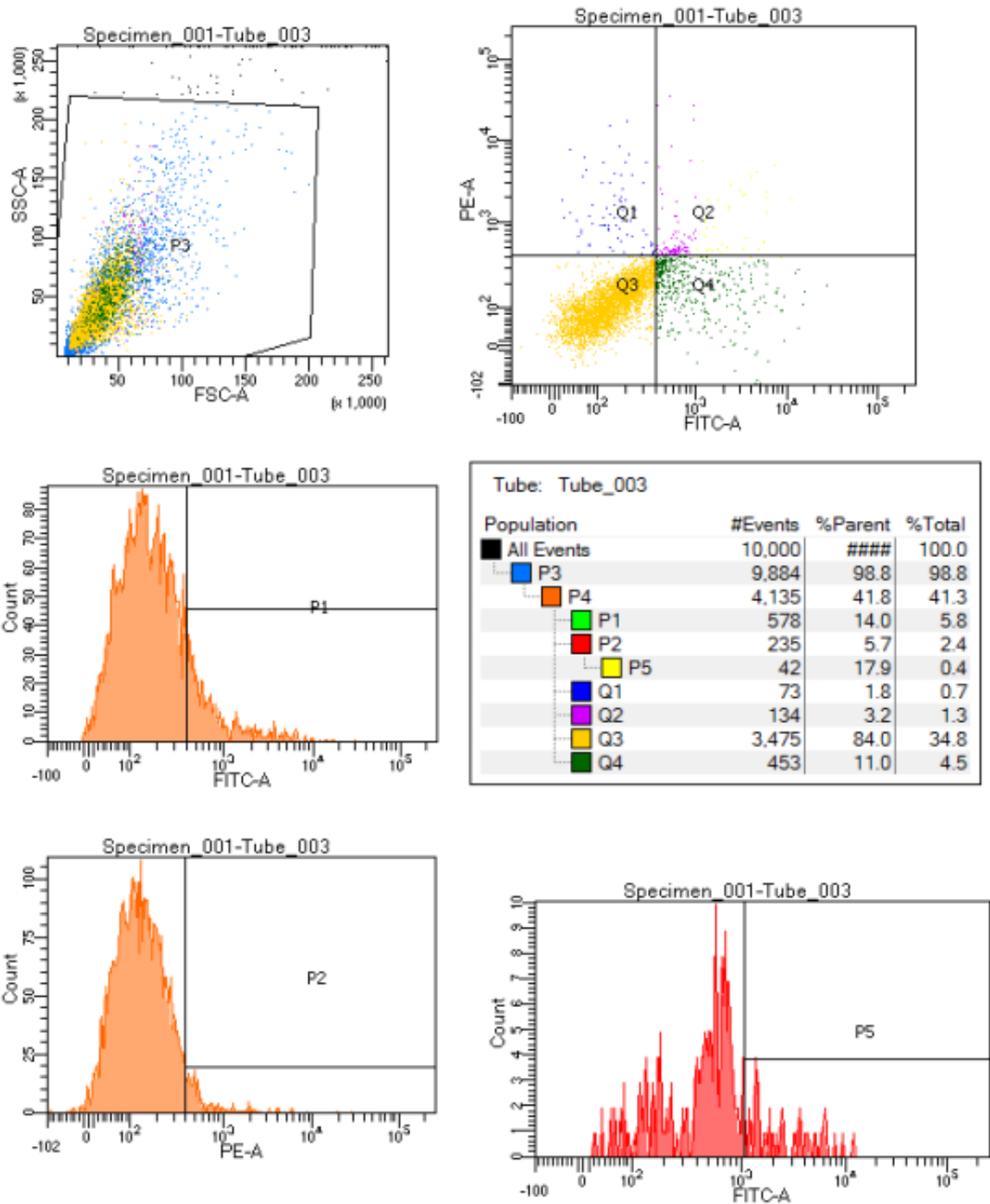
Etoposide 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

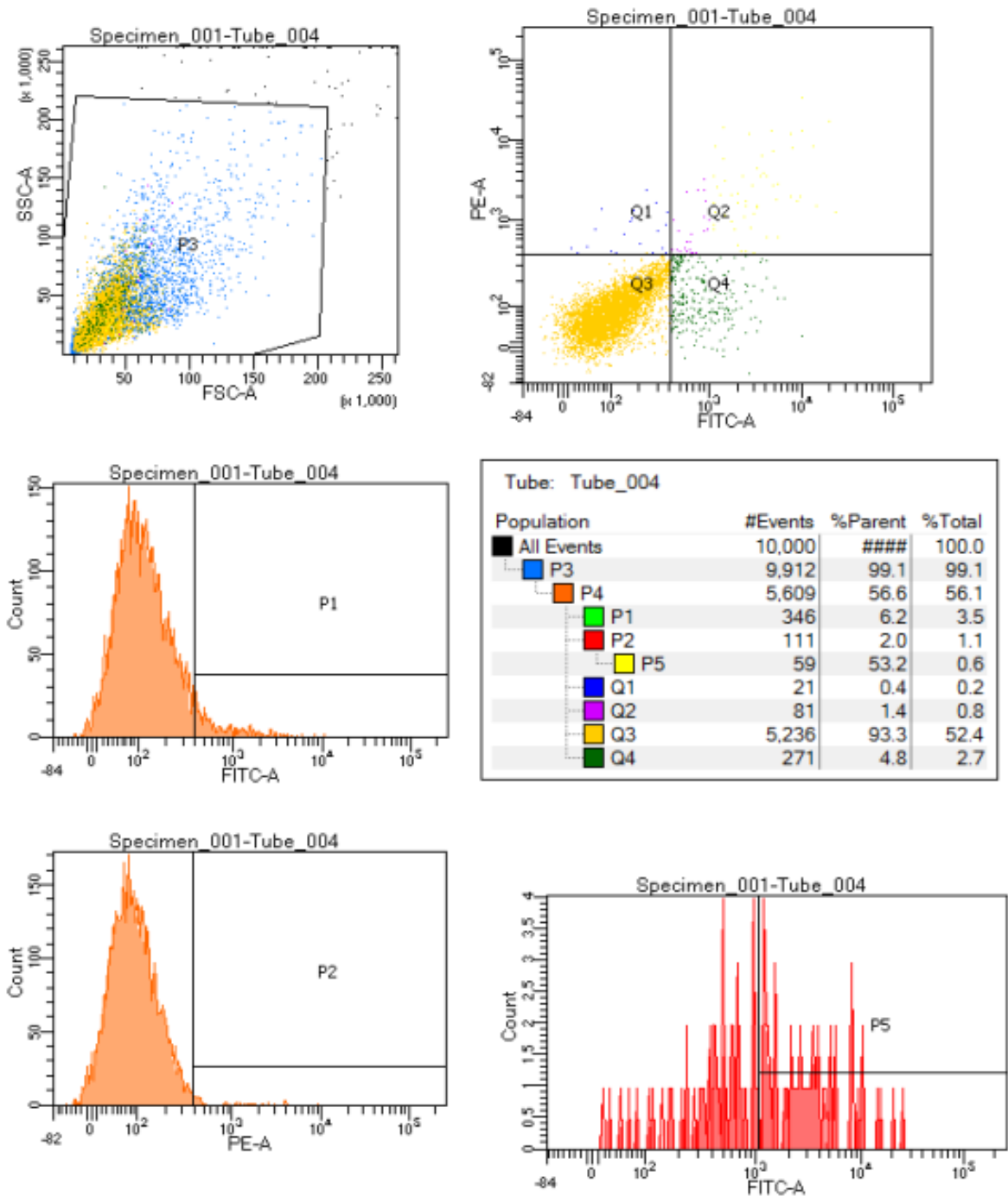
Etoposide 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

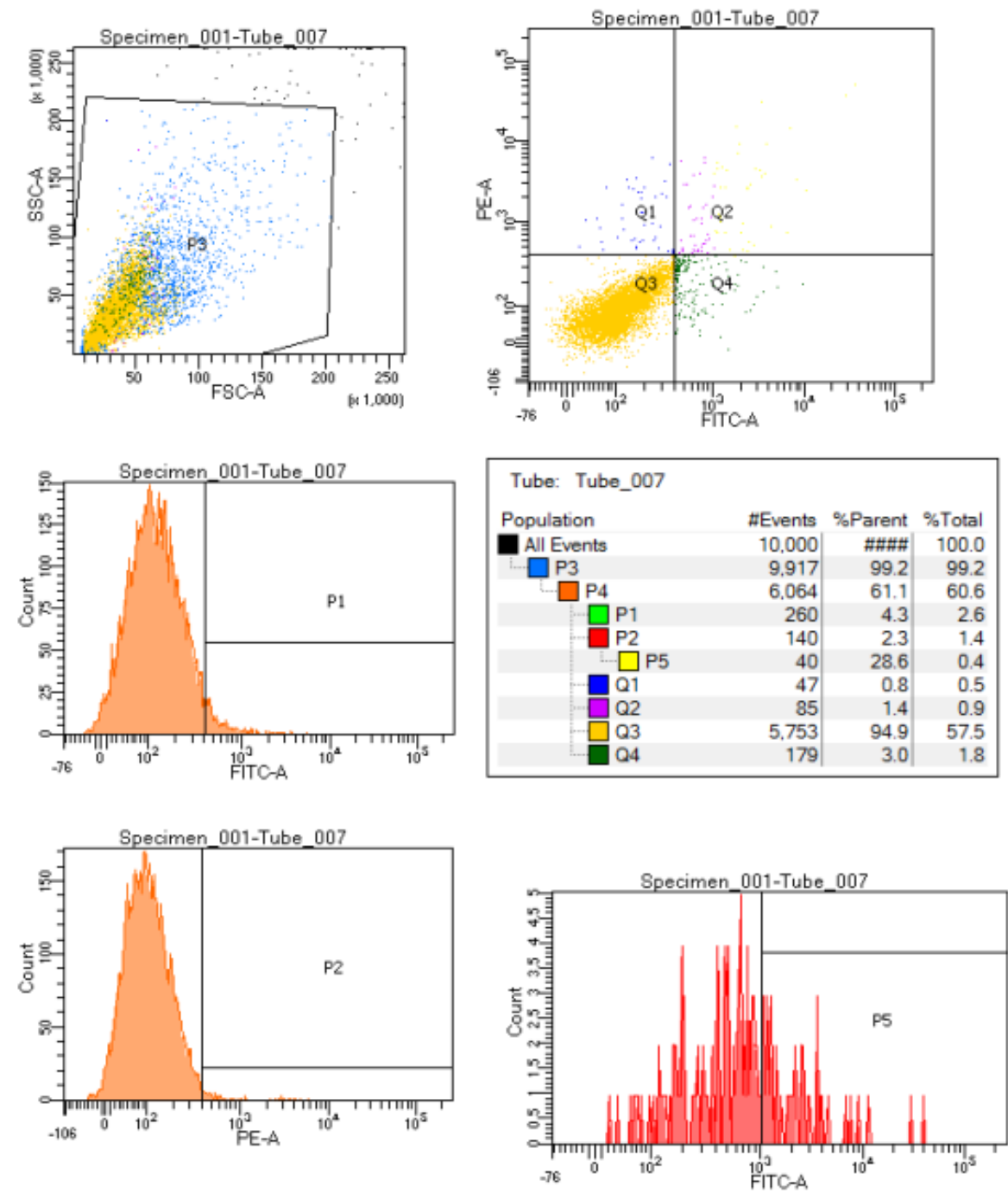
Positive control
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

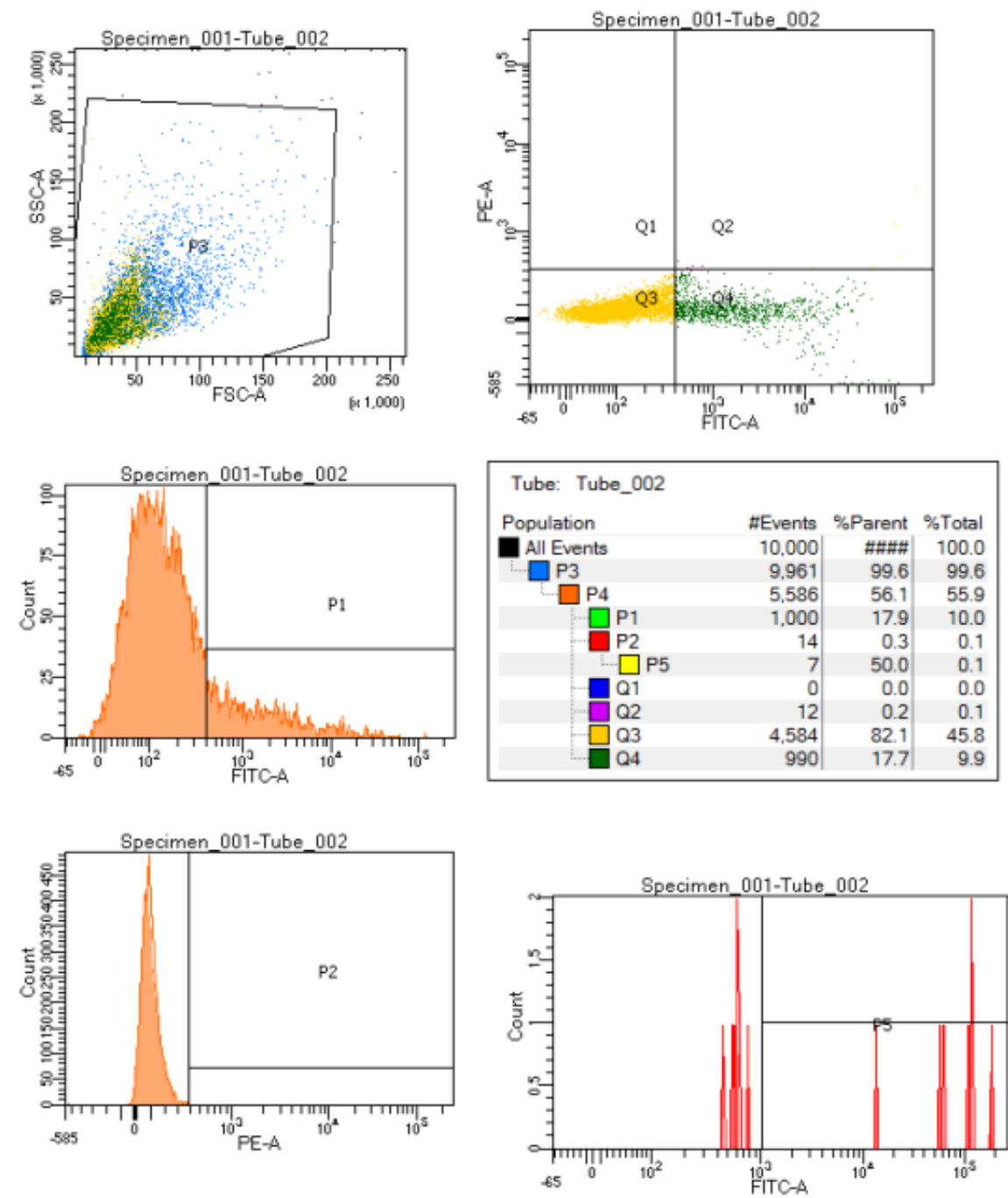
Negative control
BD FACSDiva 8.0.1



Supplementary figure 3

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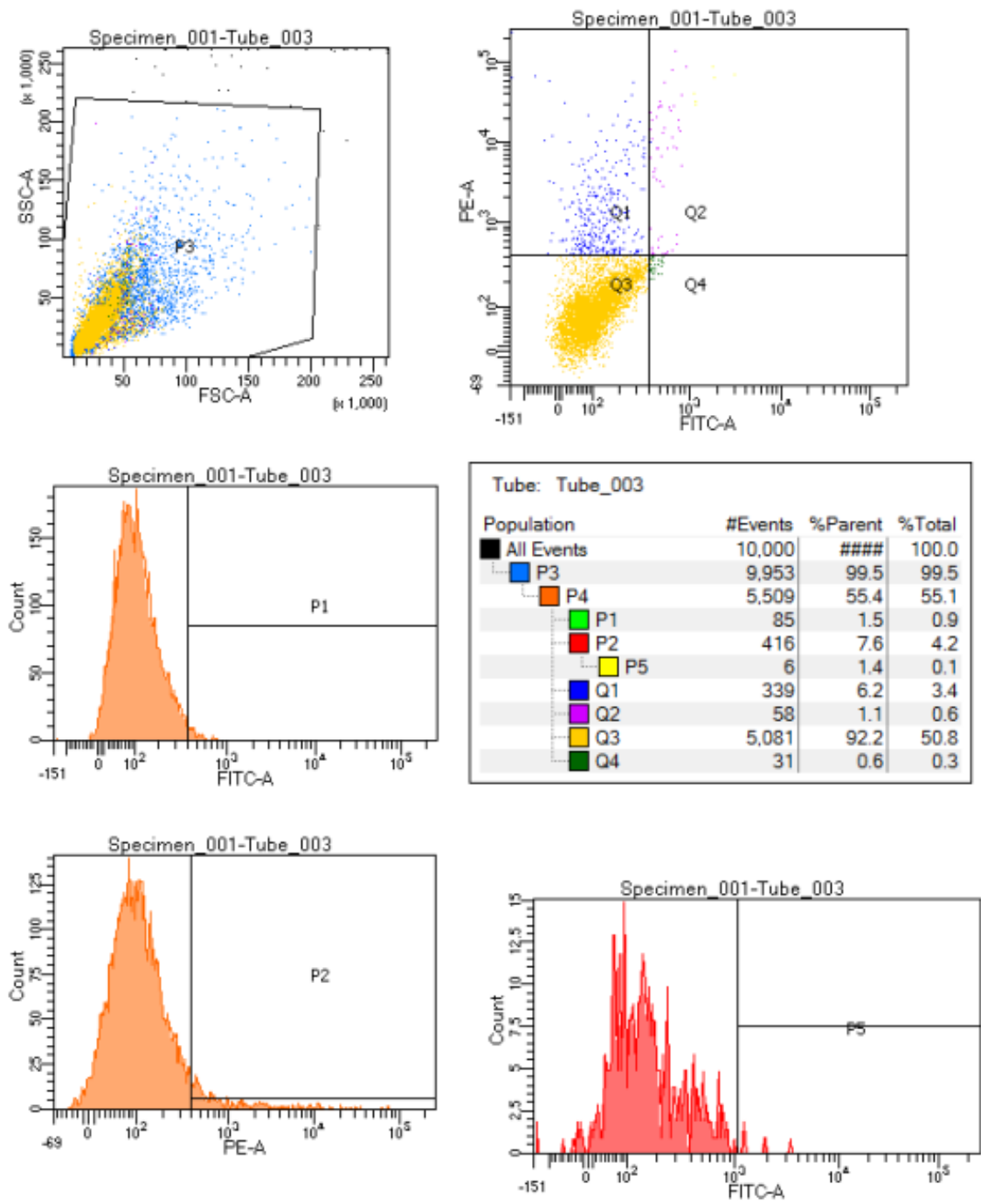
Yellow alone
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.2

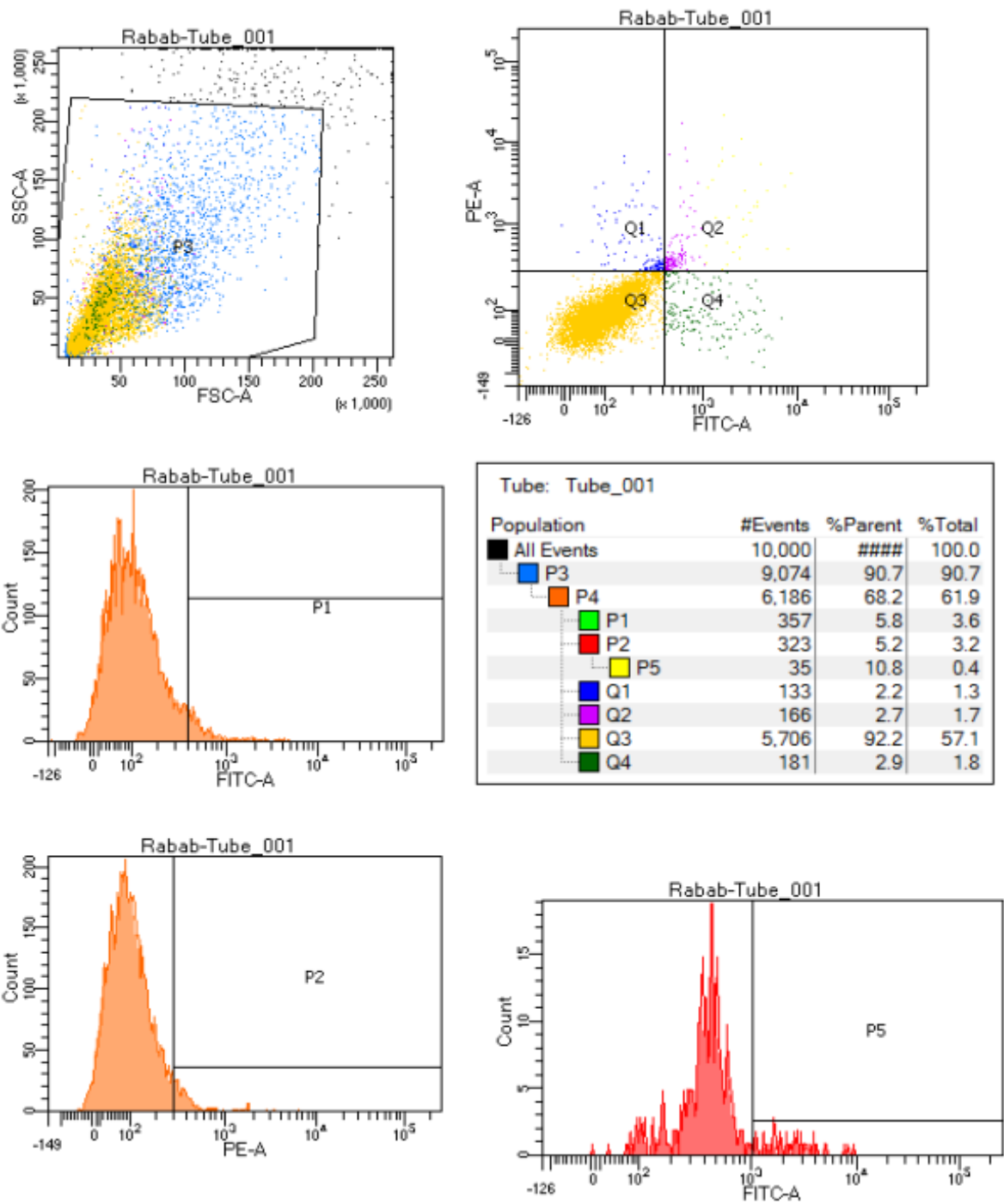
Red alone
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

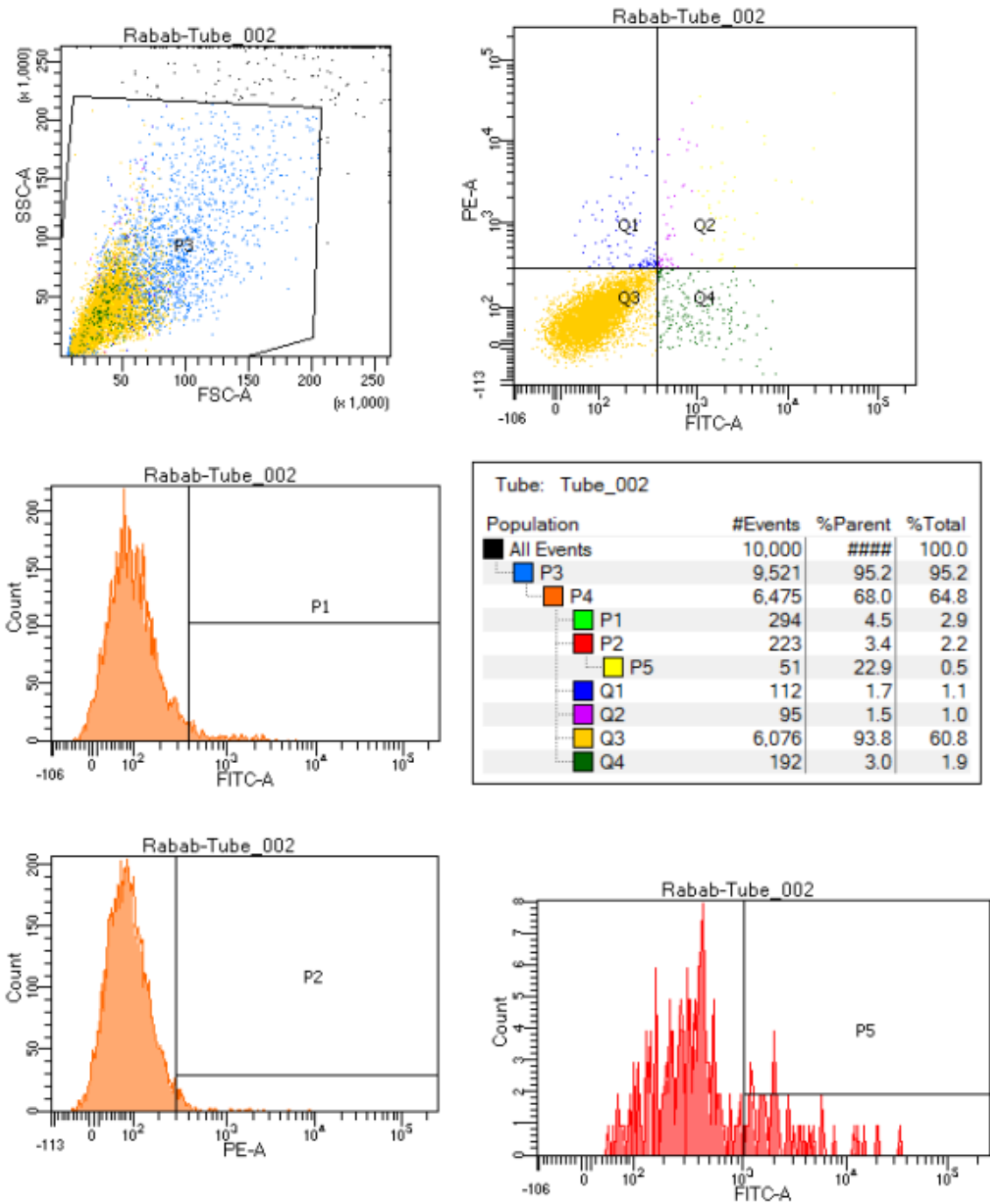
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 3

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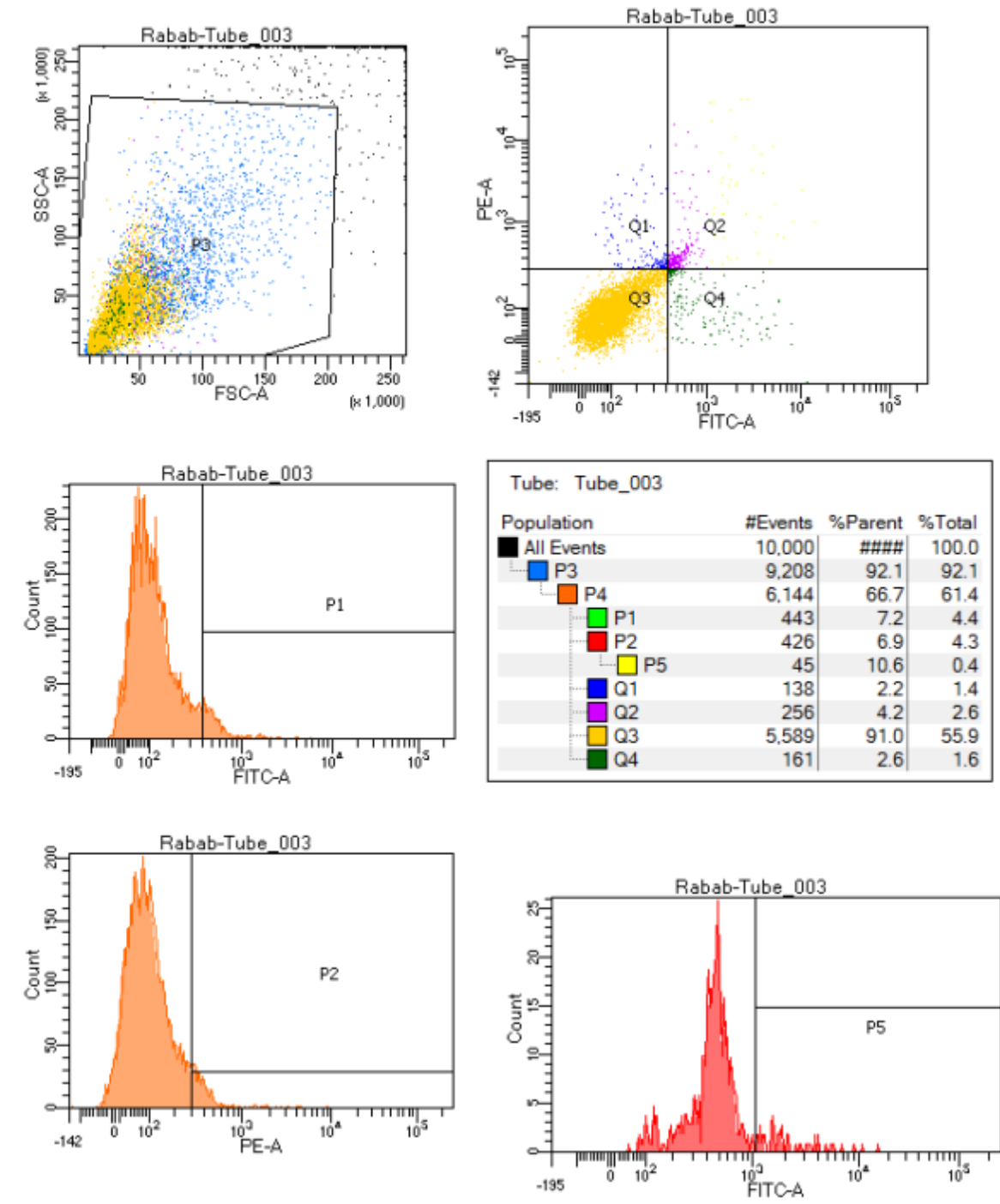
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

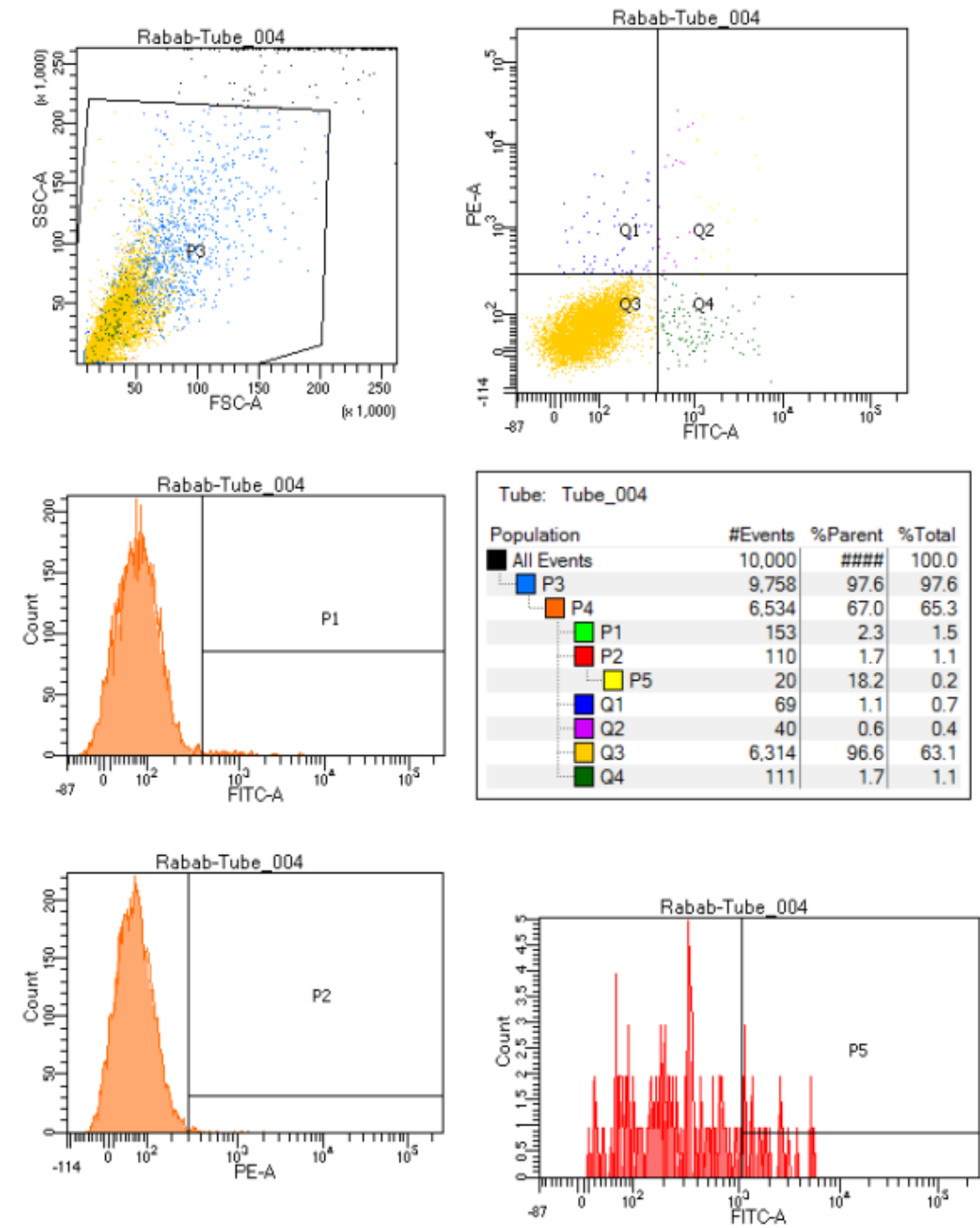
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

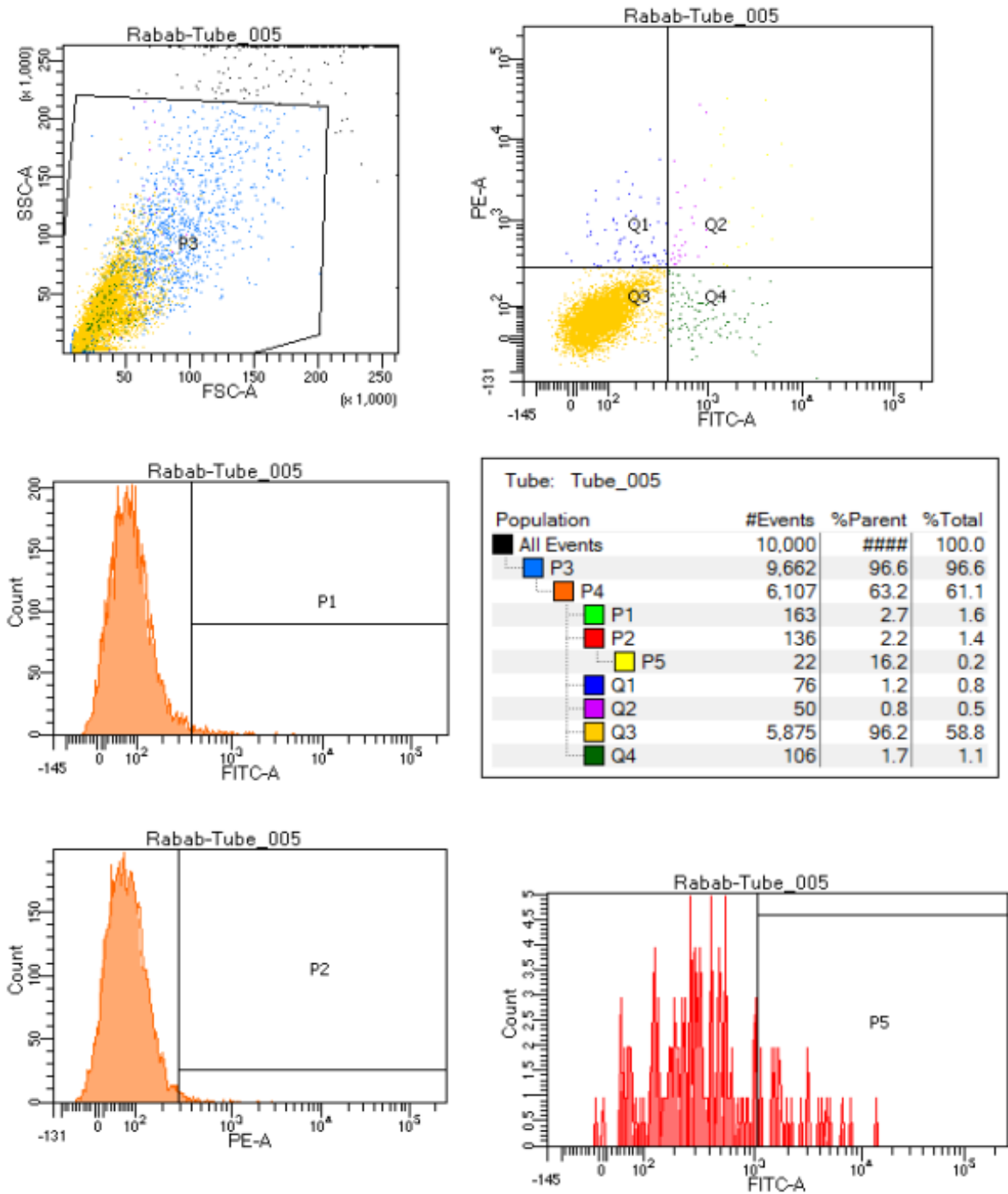
Etoposide 2hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

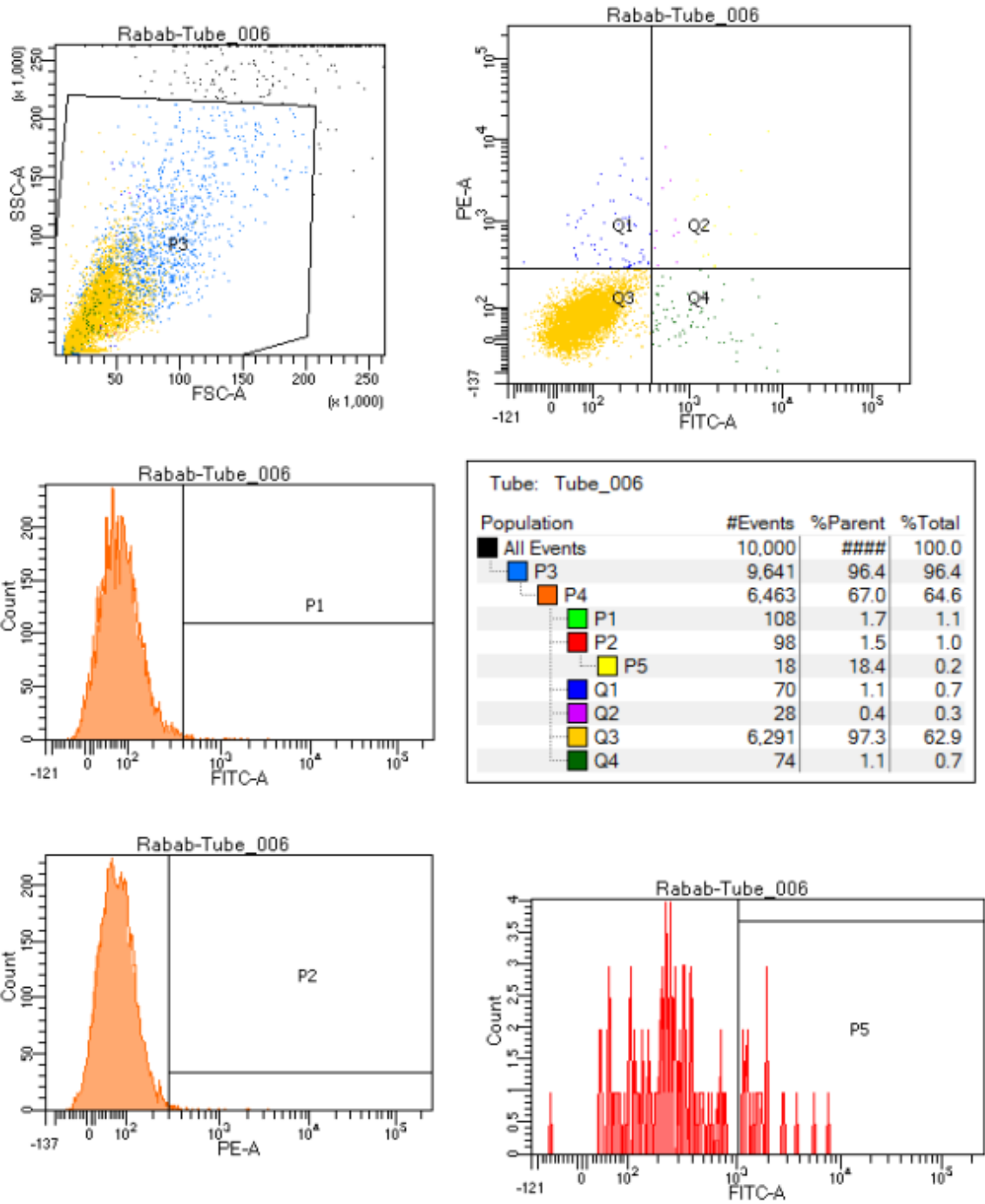
Etoposide 2hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

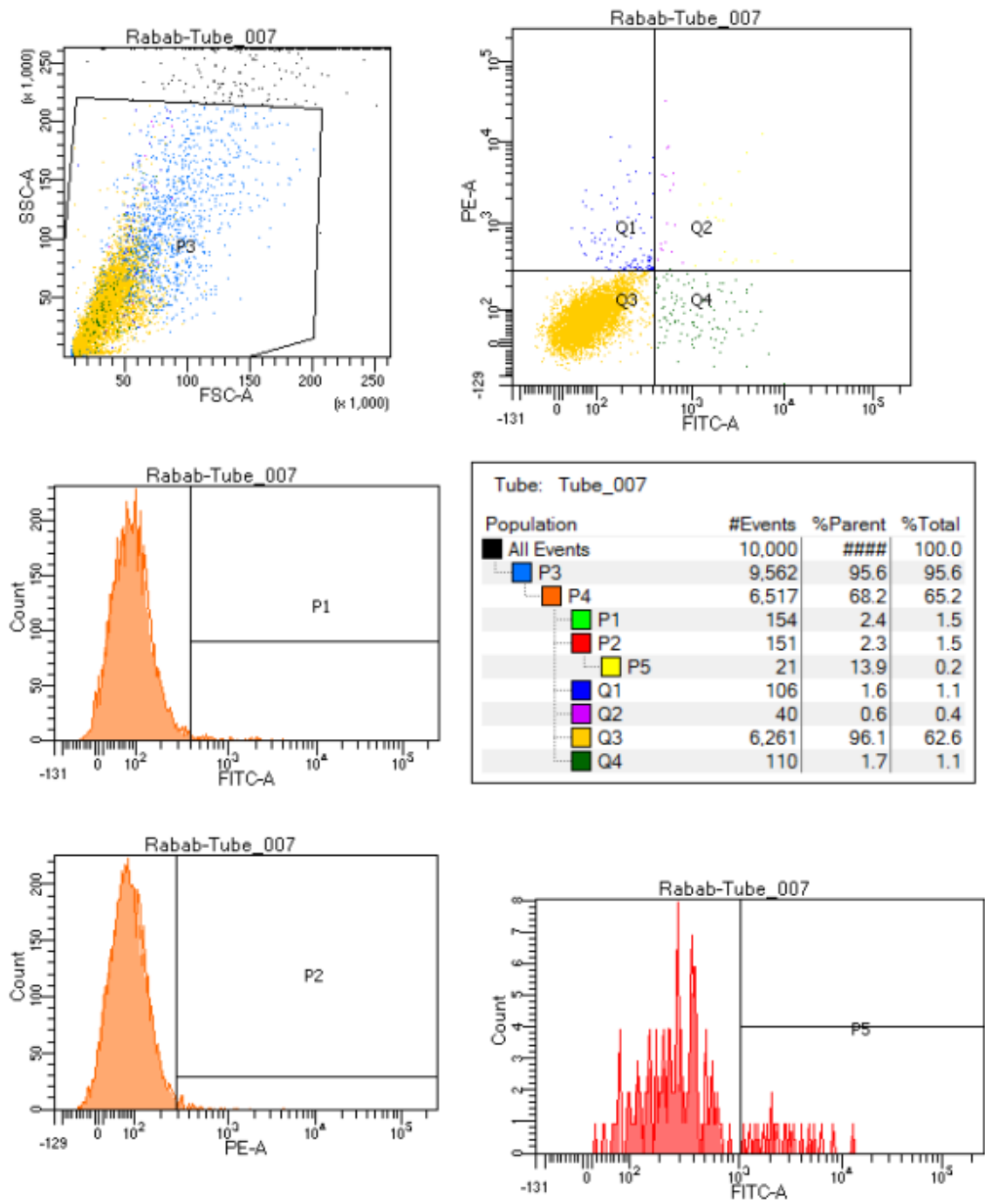
Etoposide 2hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

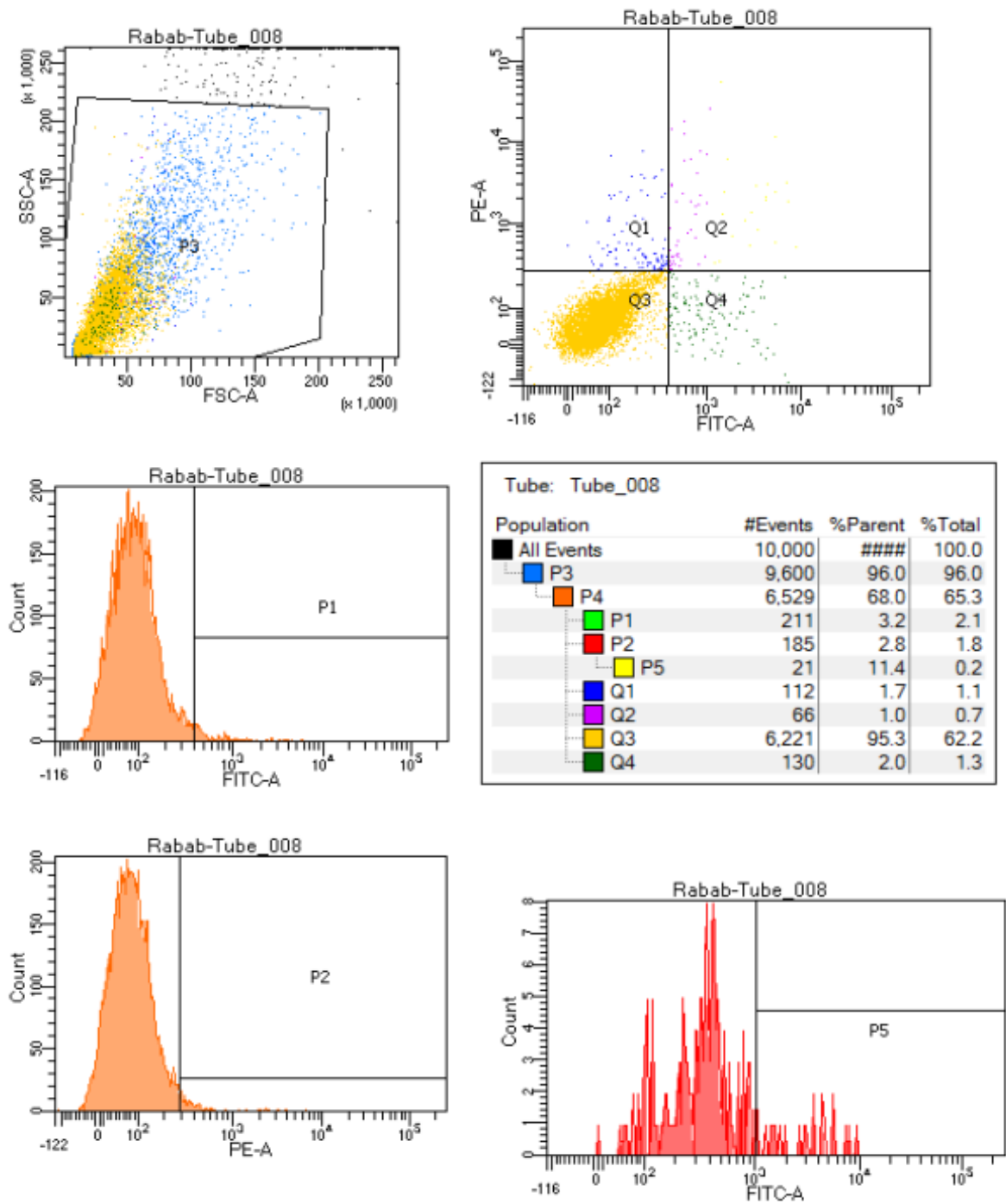
Etoposide 4hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

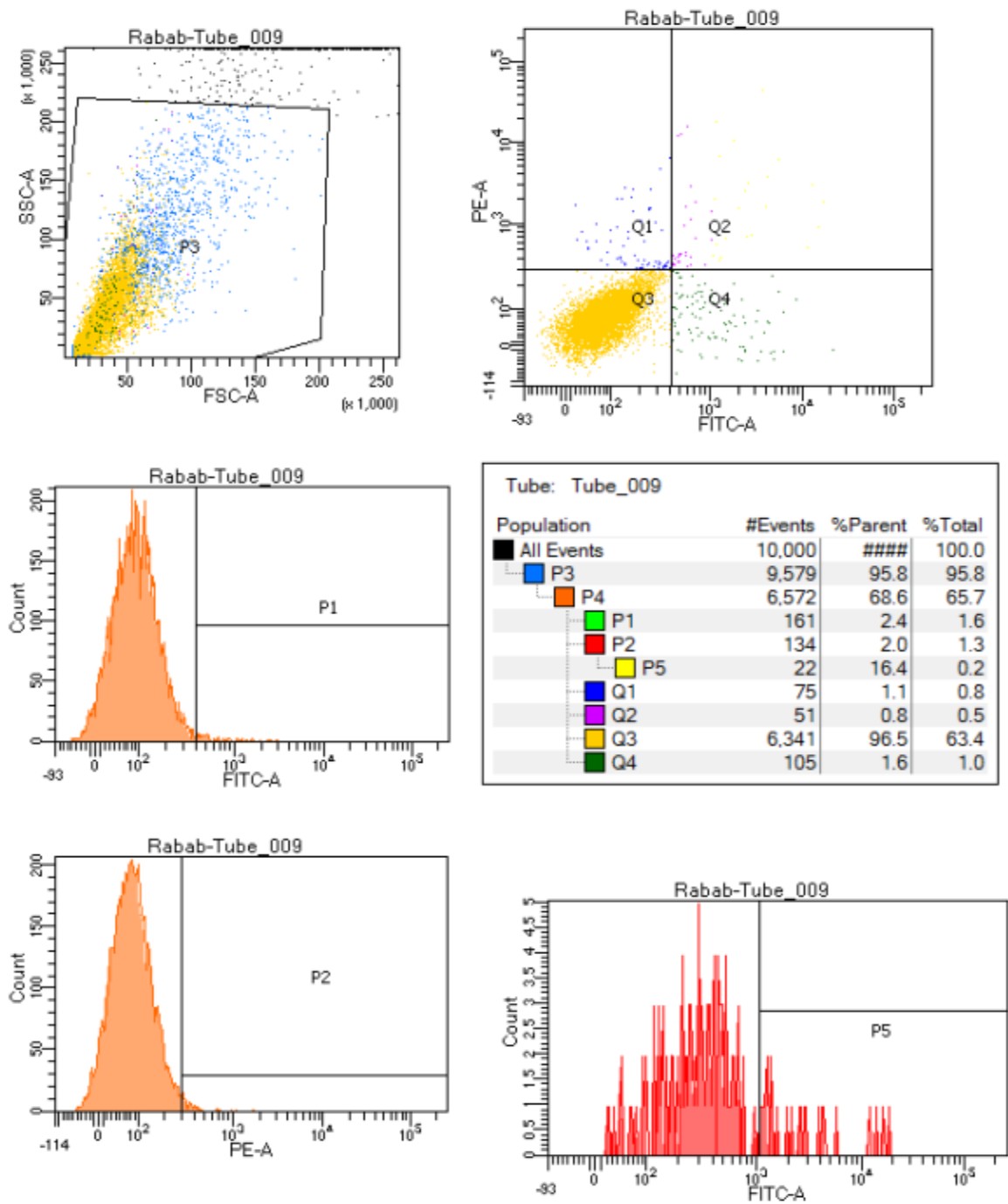
Etoposide 4hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

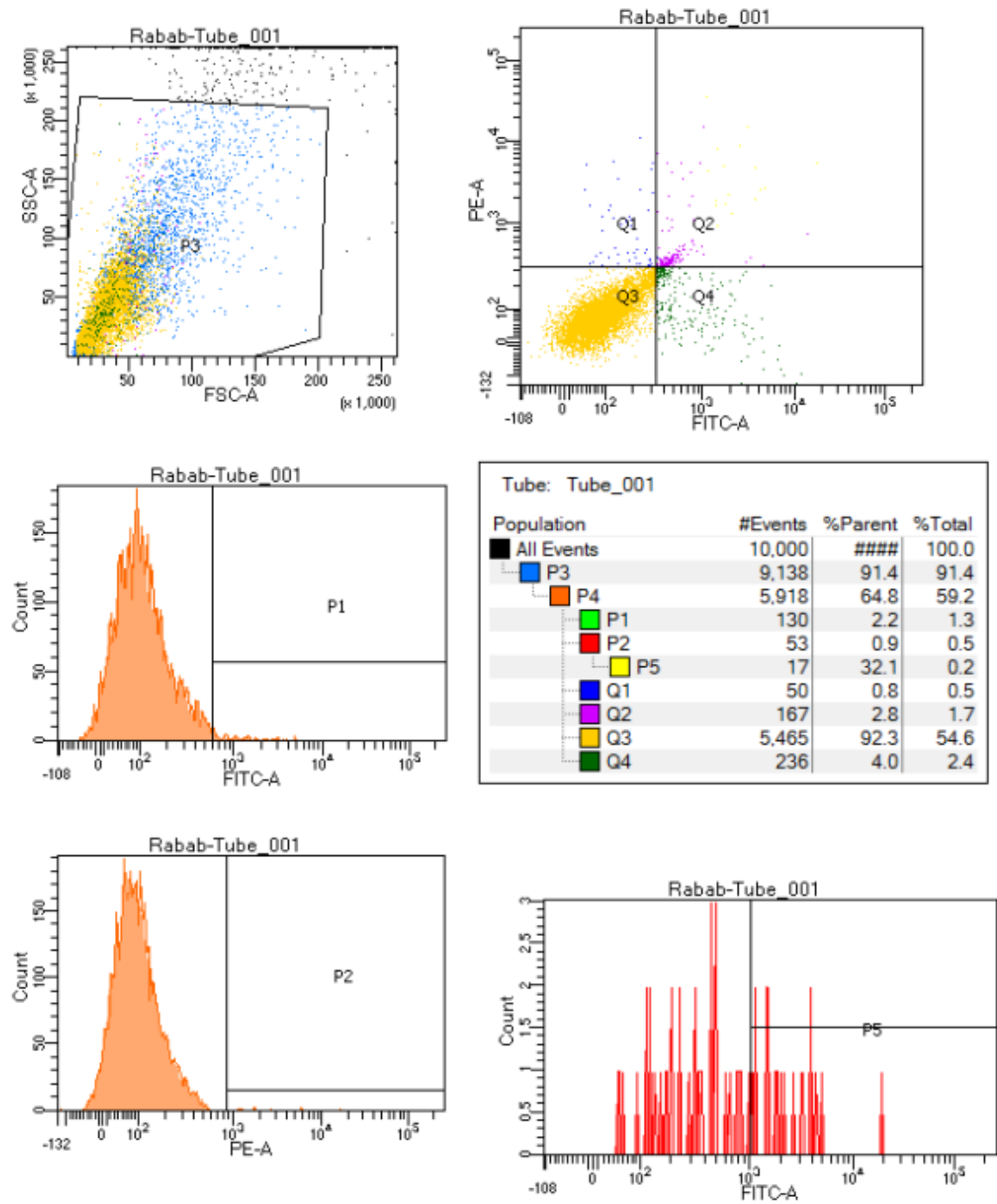
Etoposide 4hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

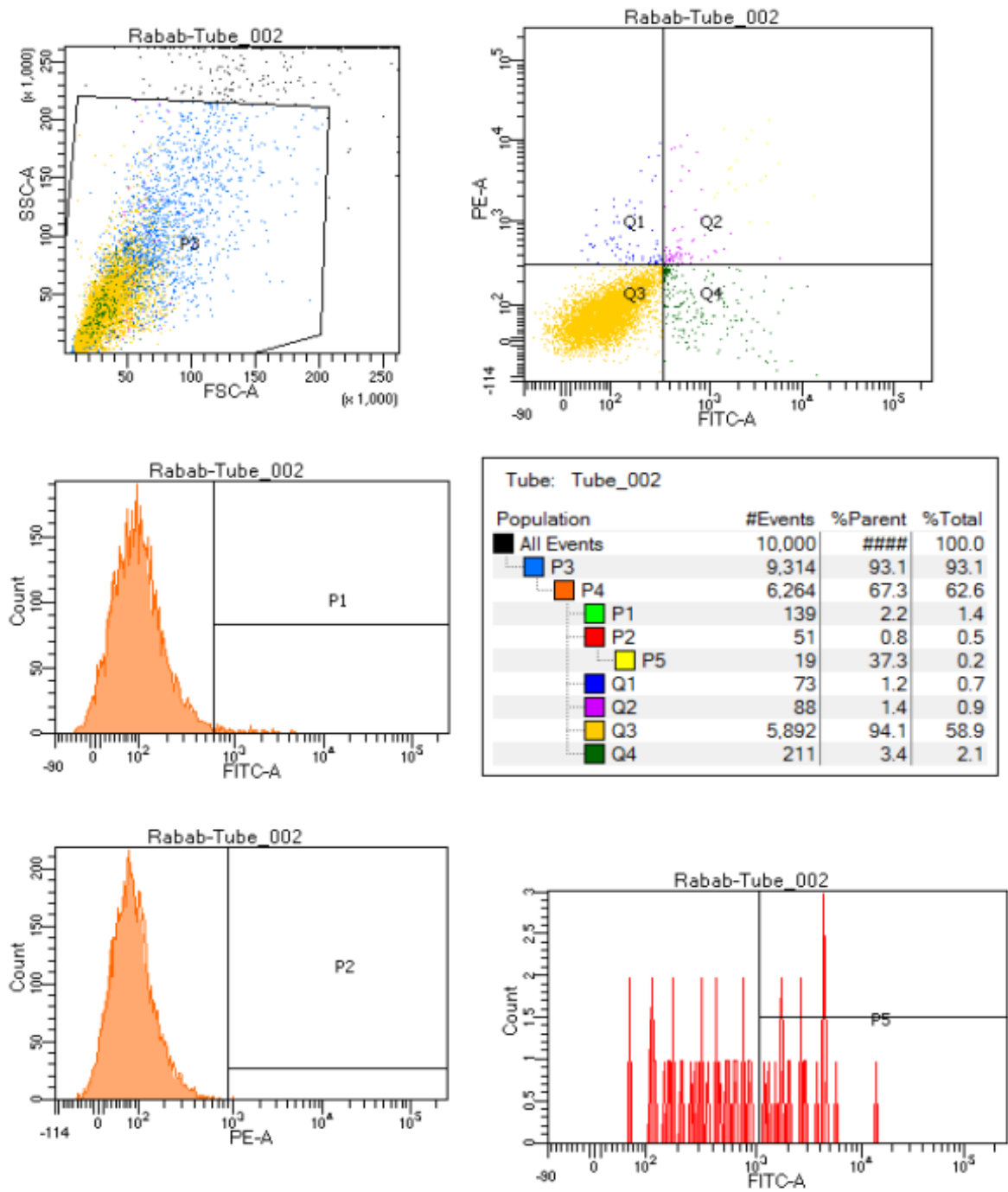
Etoposide 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

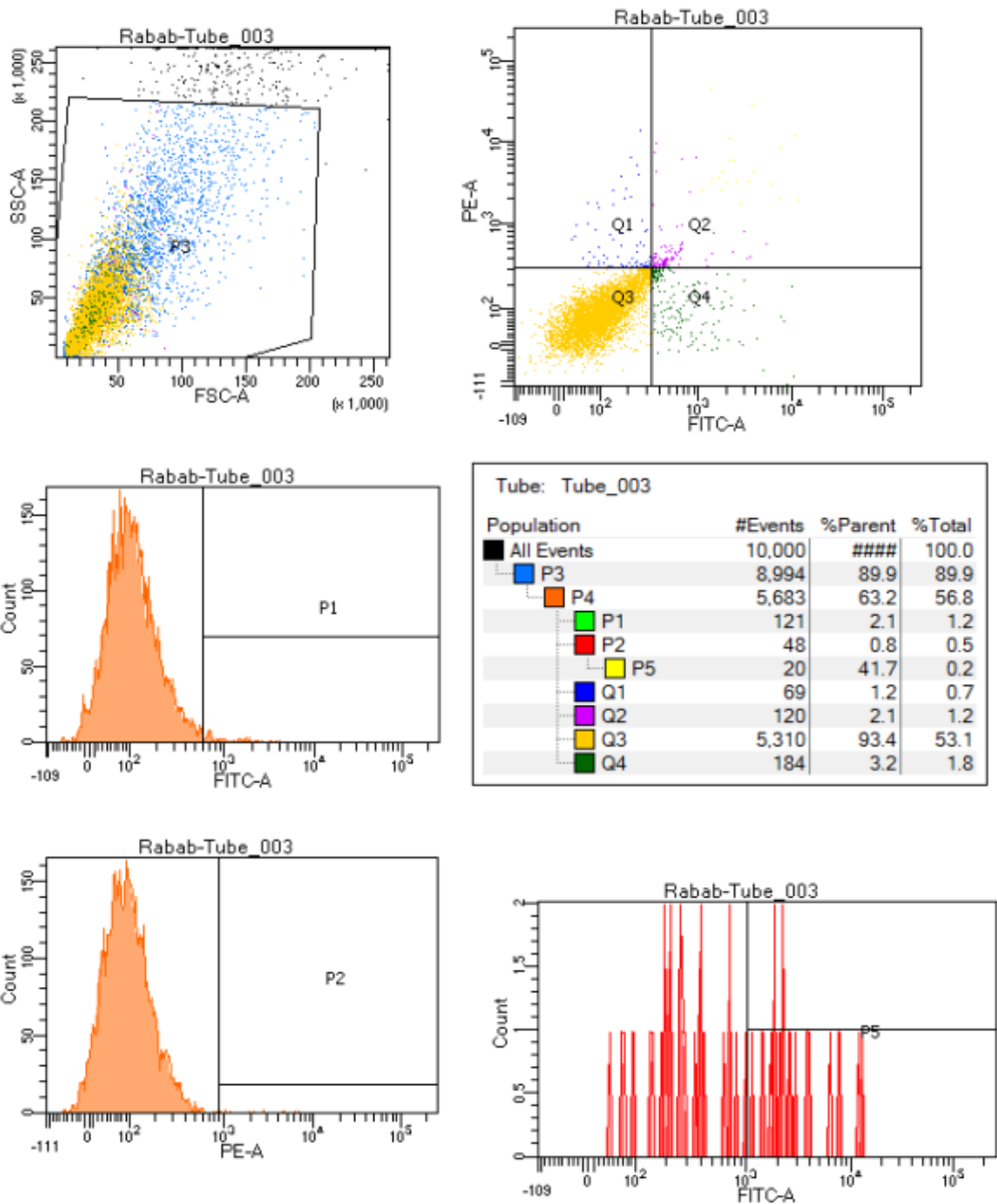
Etoposide 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

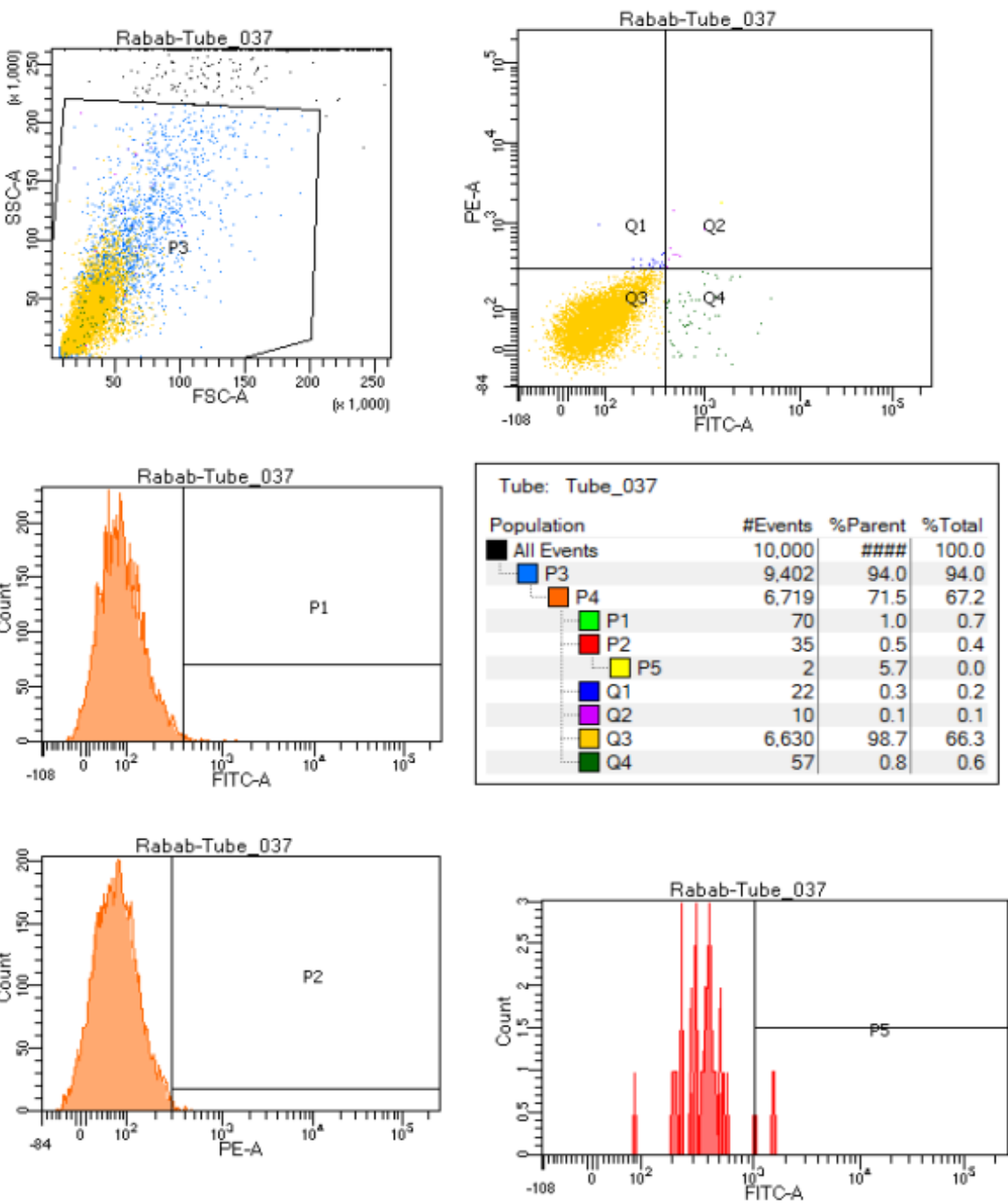
Etoposide 6hrs
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

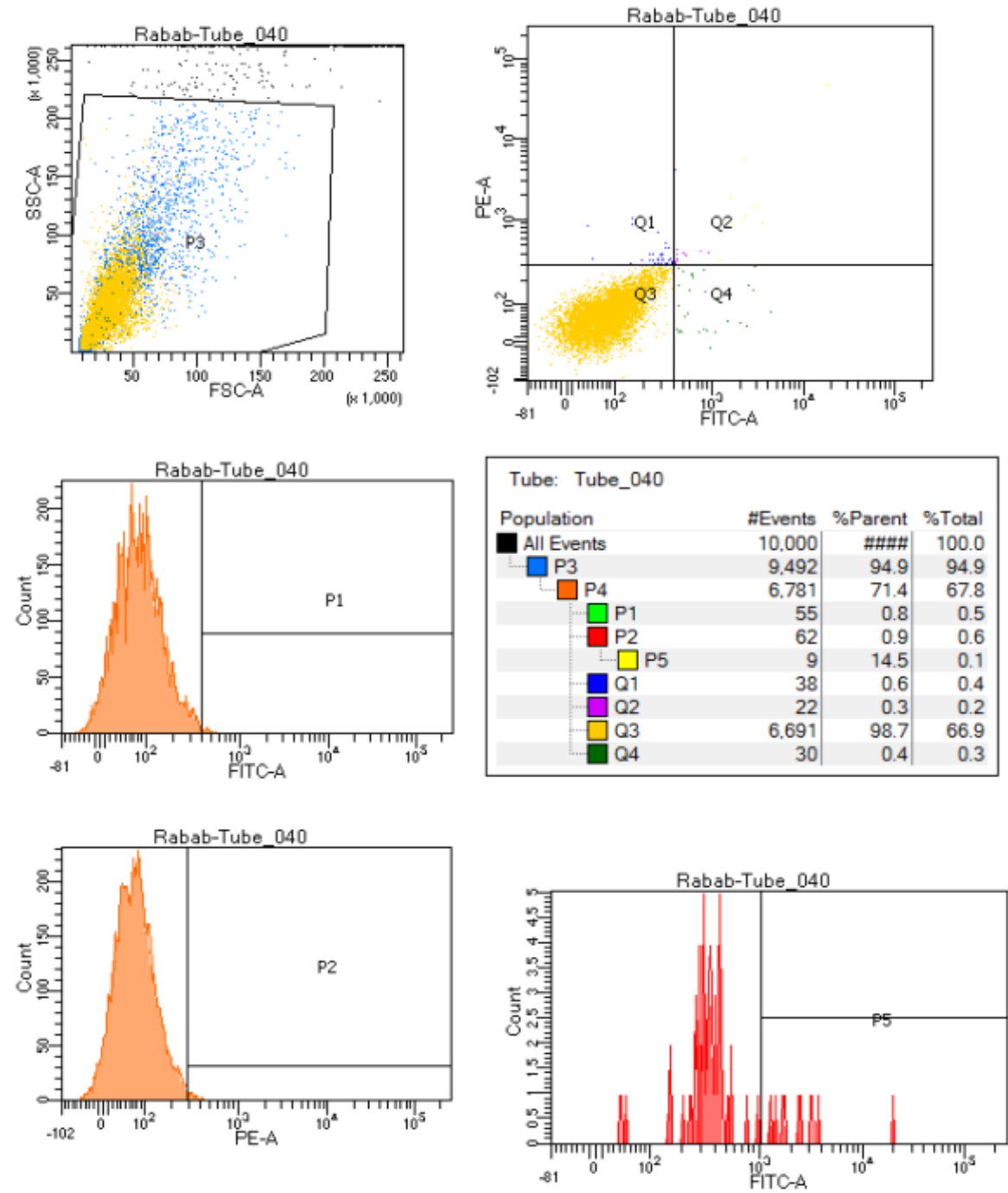
Positive control
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

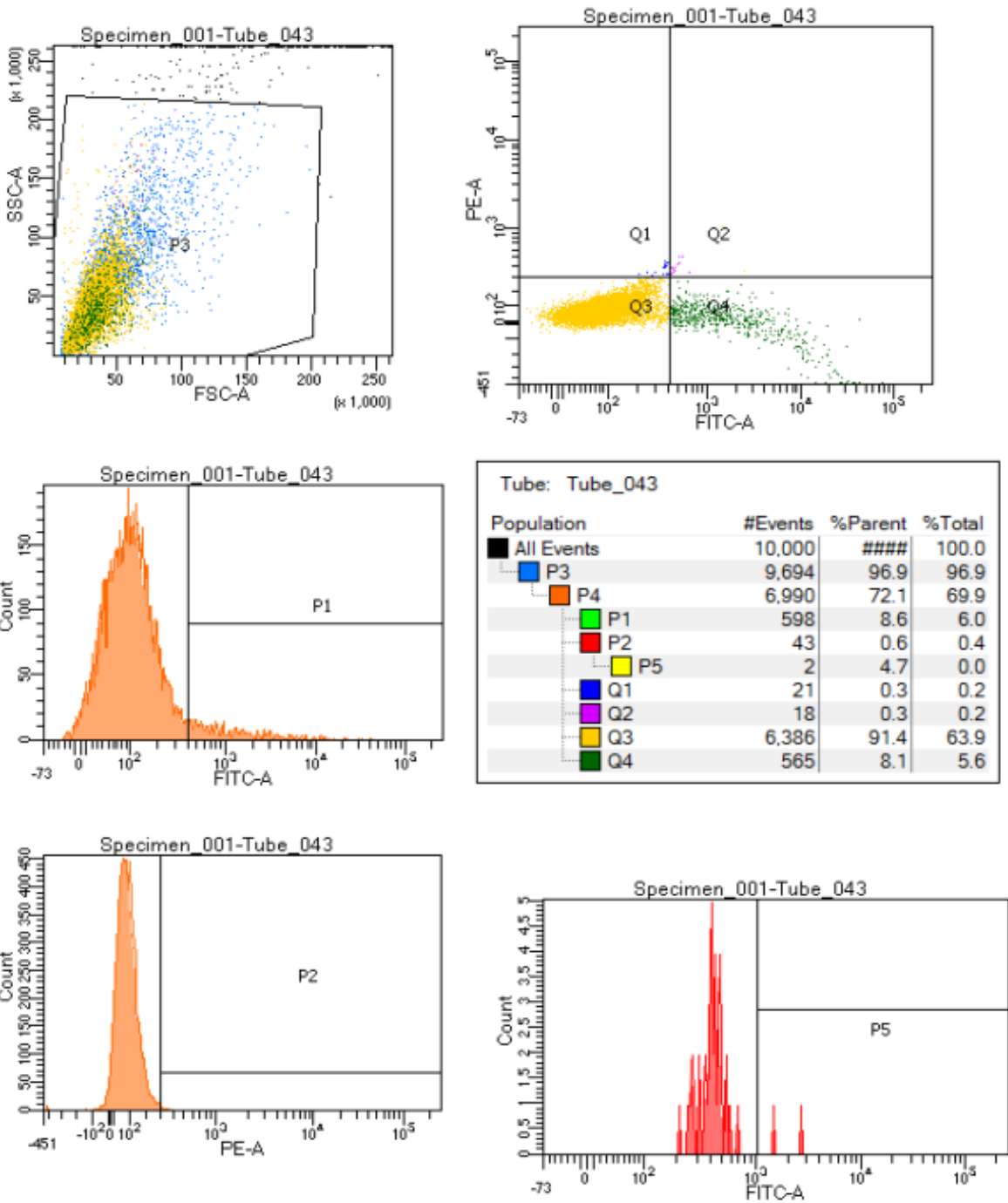
Negative control
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

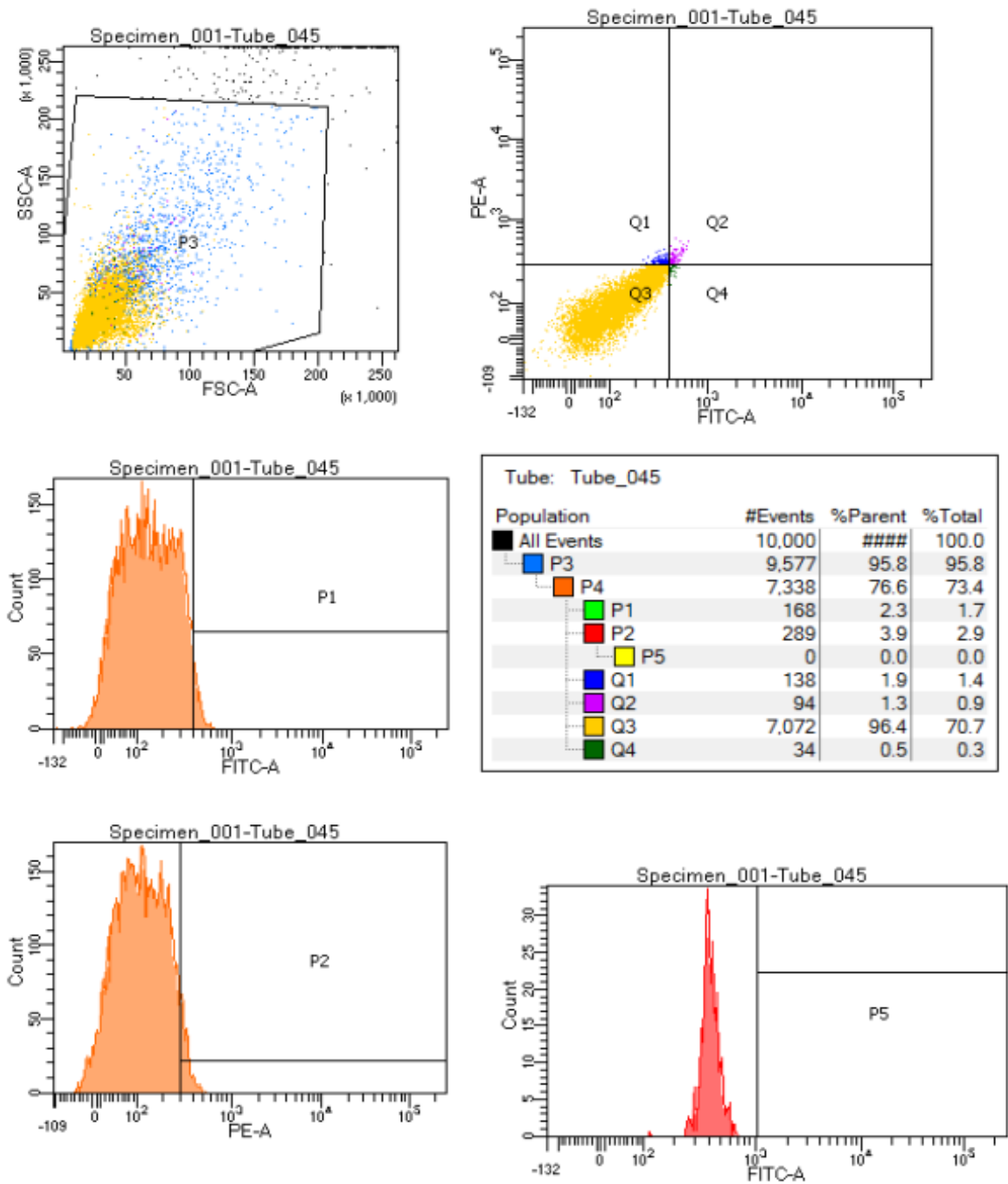
Yellow alone
BD FACSDiva 8.0.1



Supplementary figure 3

Repeat.3

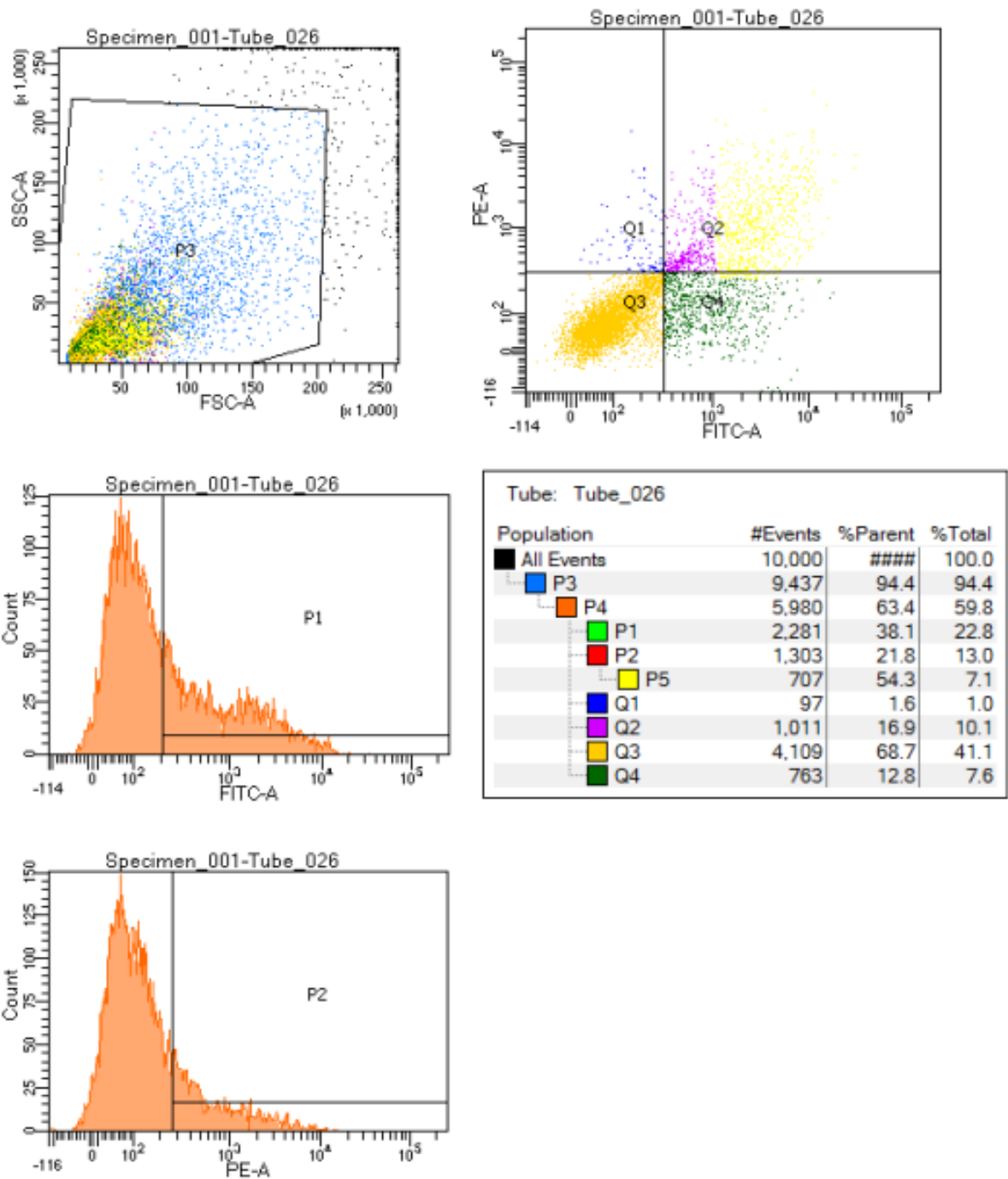
Red alone
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.1

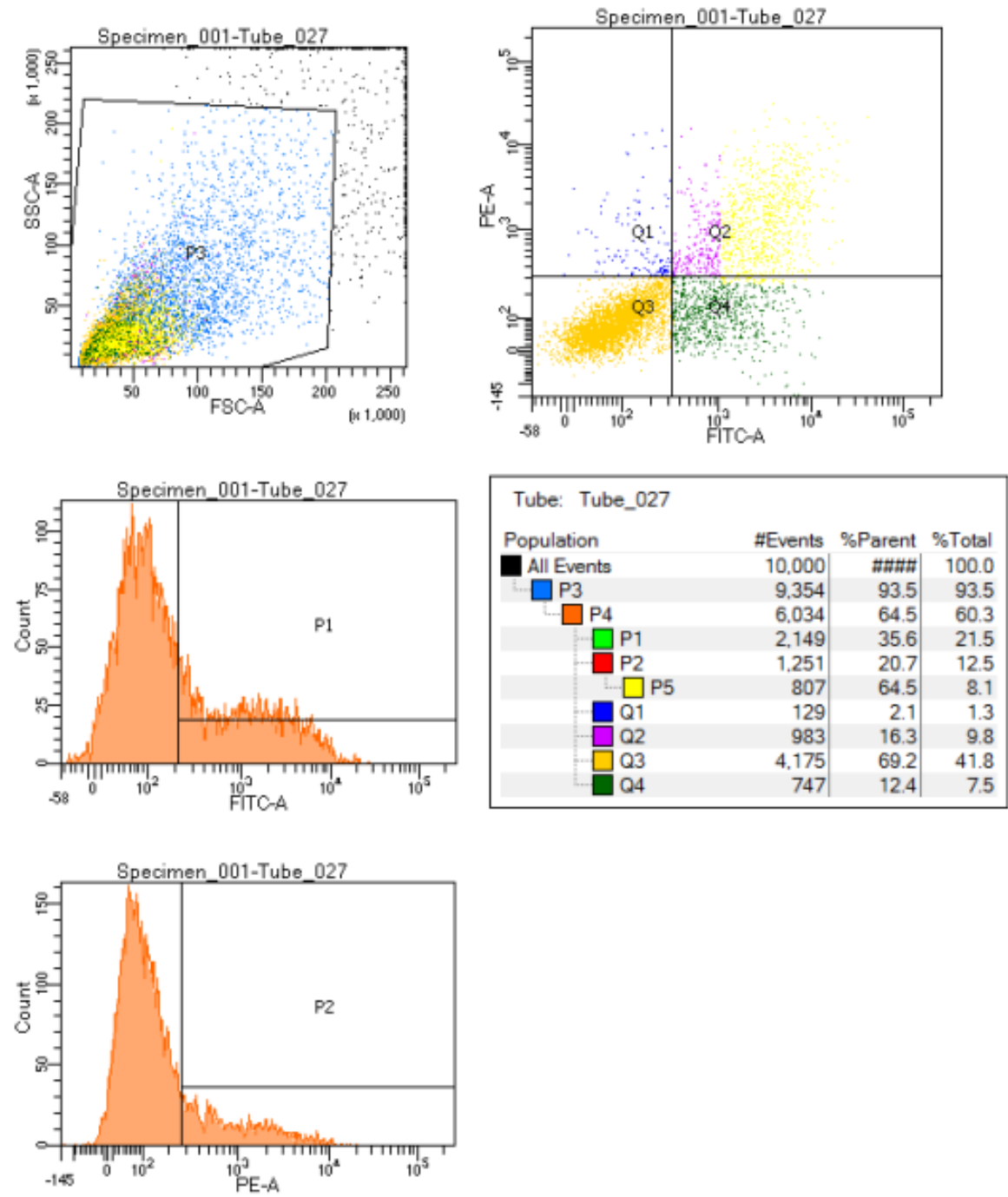
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.1

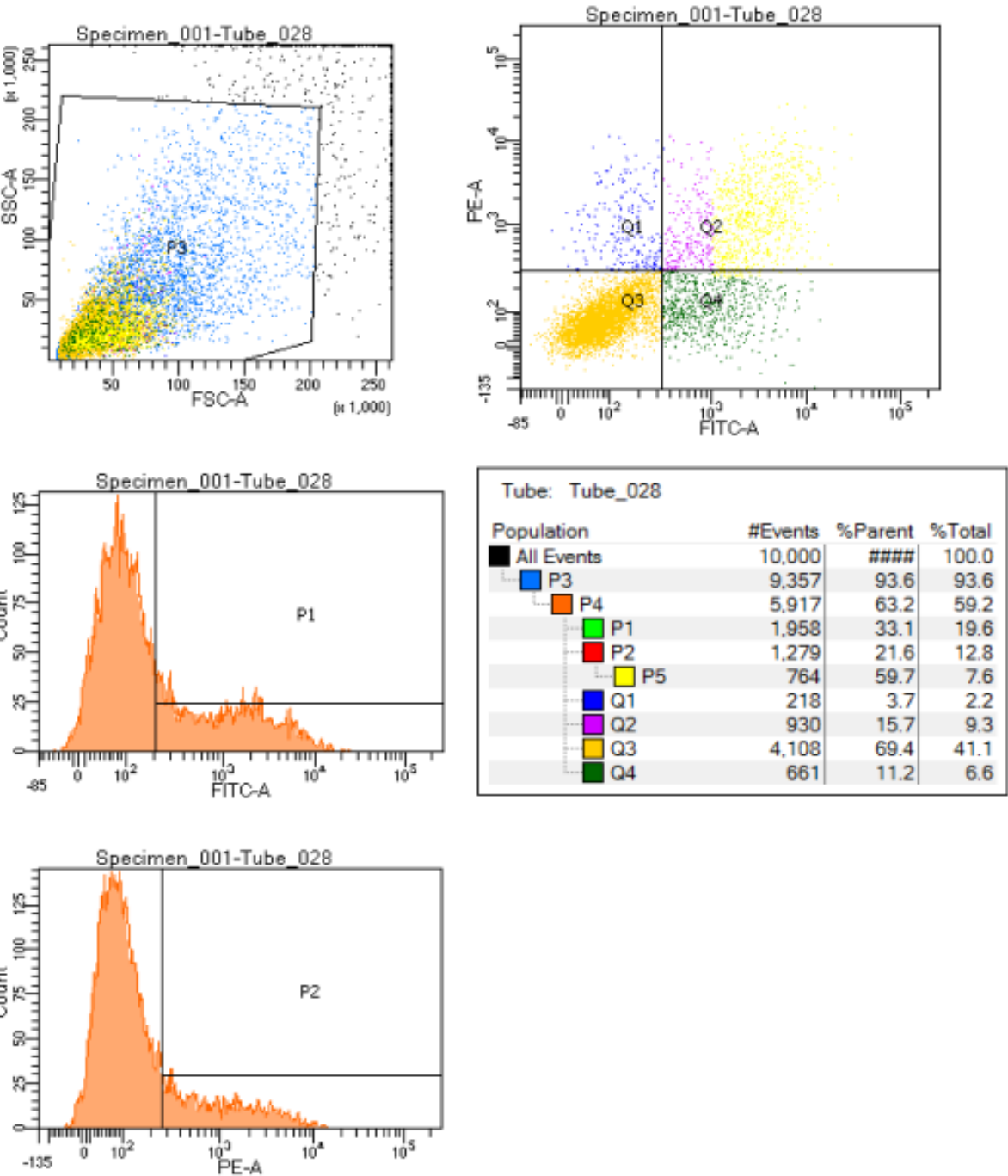
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.1

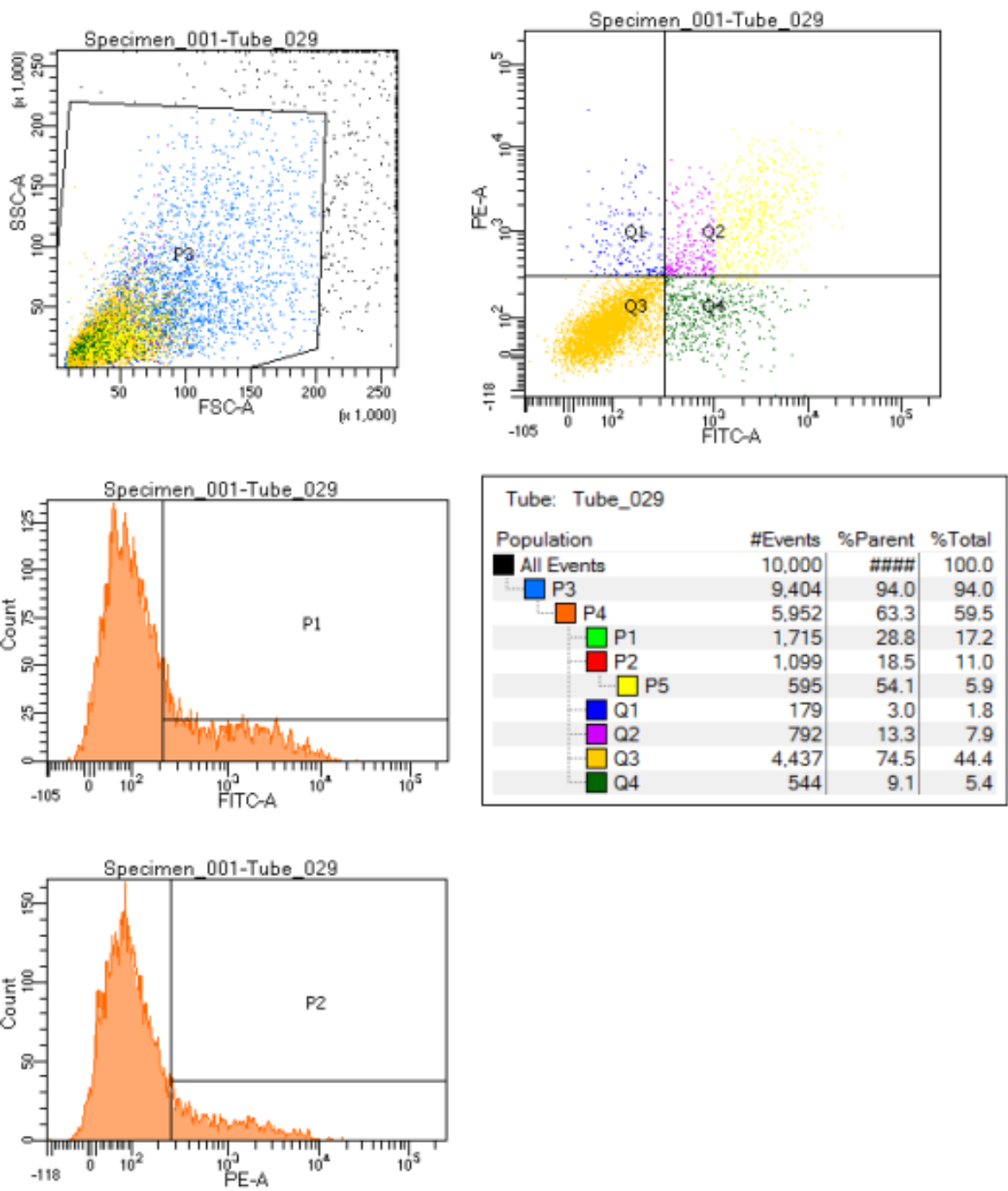
B3 20μM 18hrs
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.1

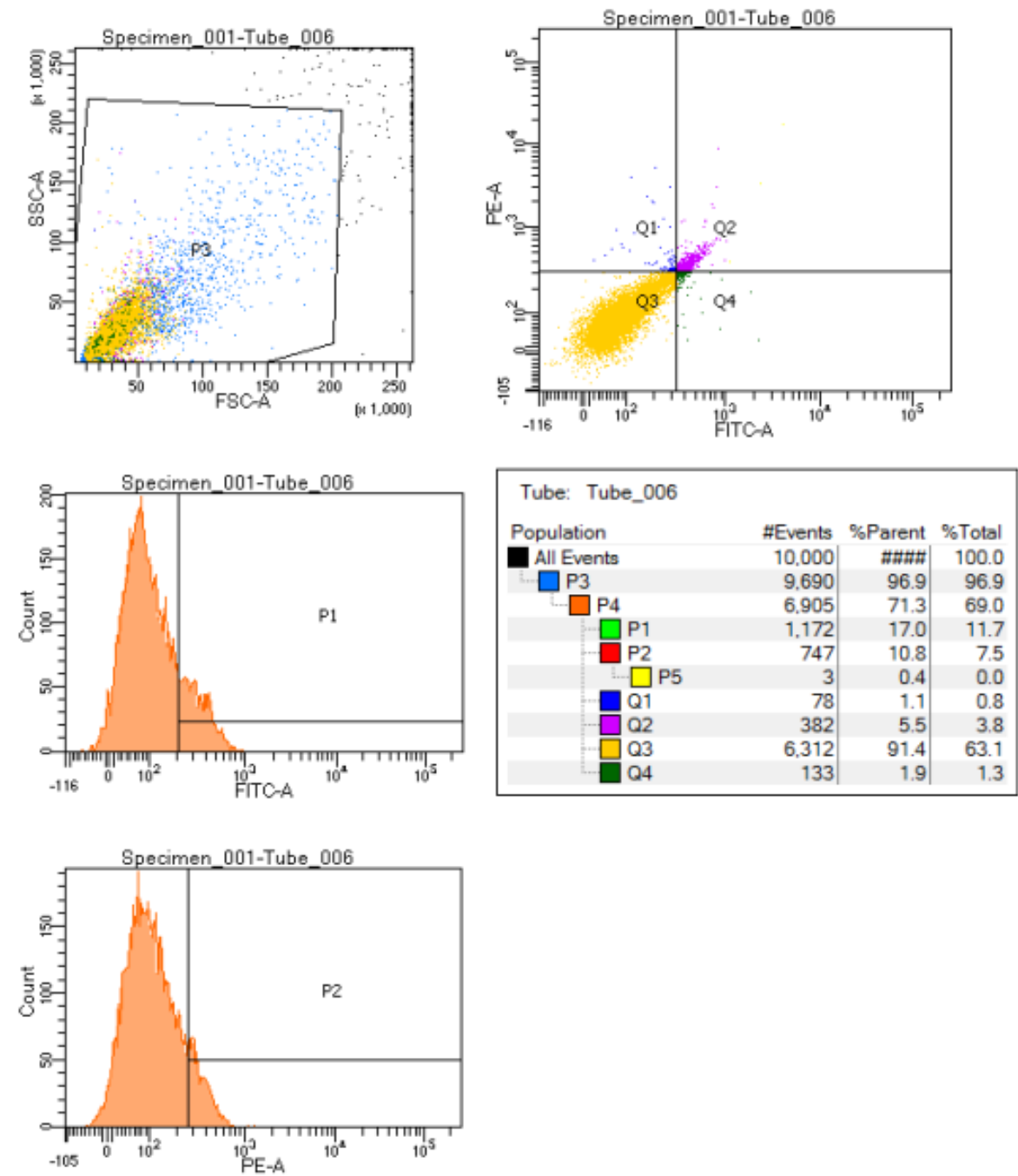
B3 20μM 18hrs
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.1

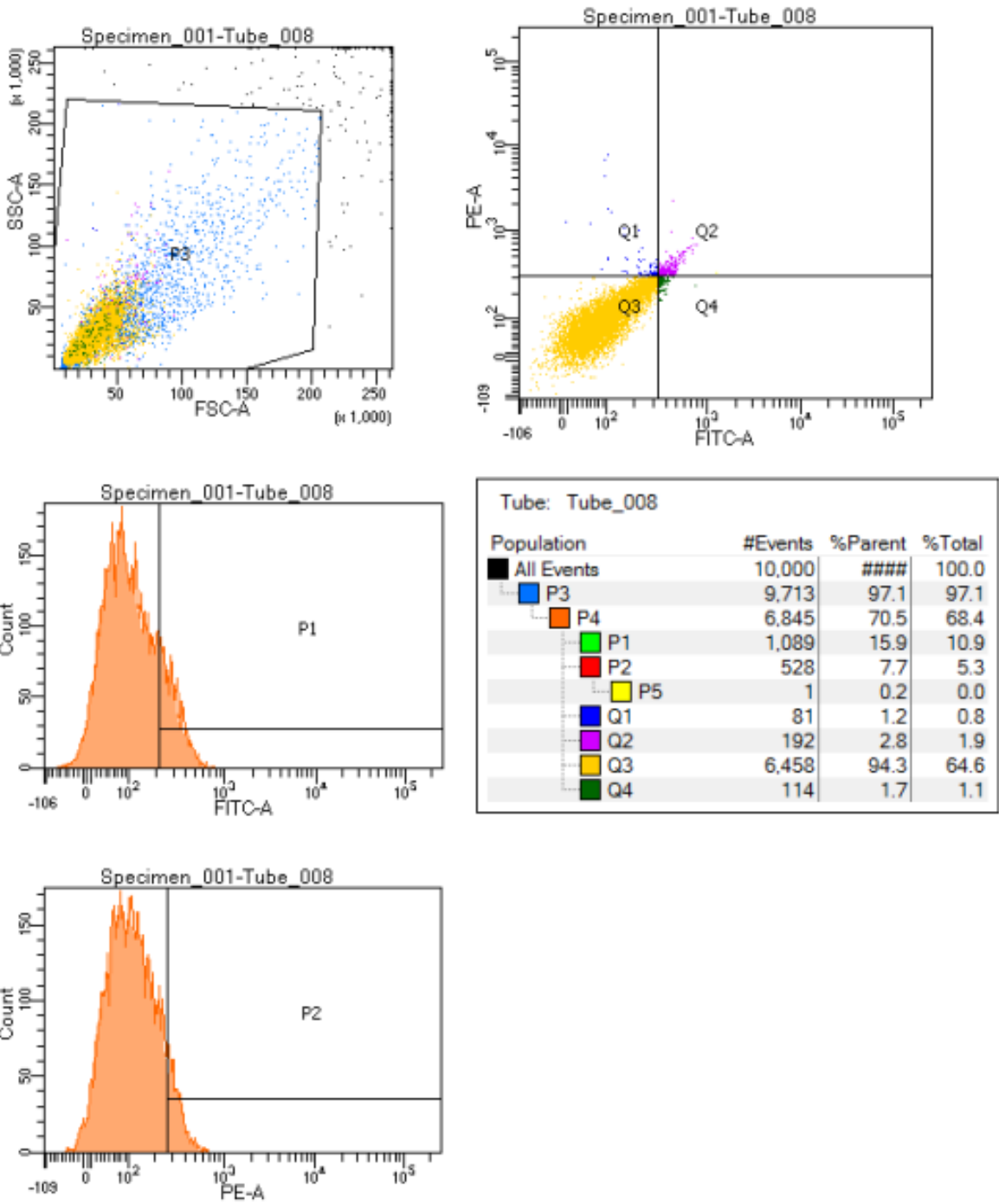
Positive control
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.1

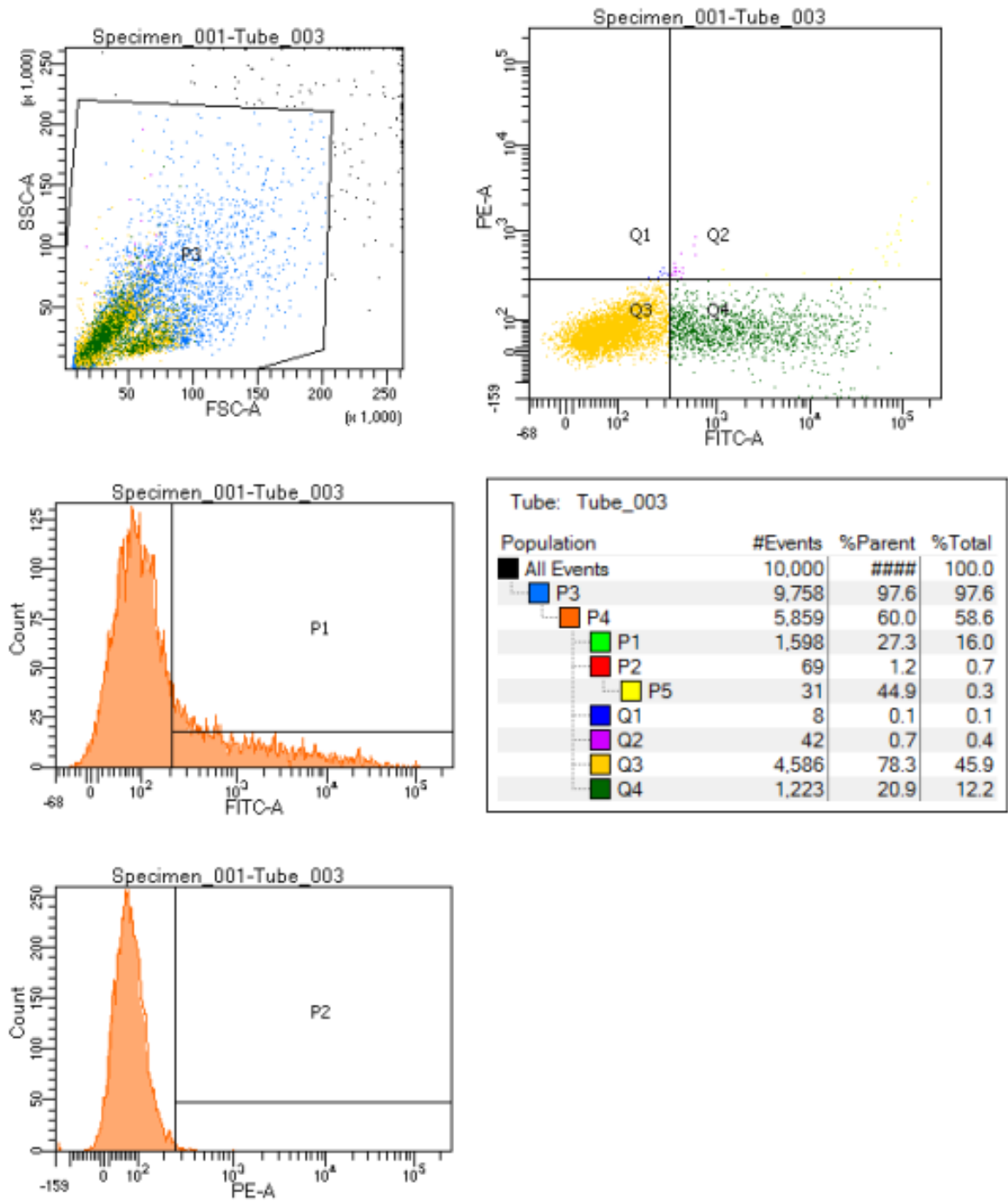
Negative control
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.1

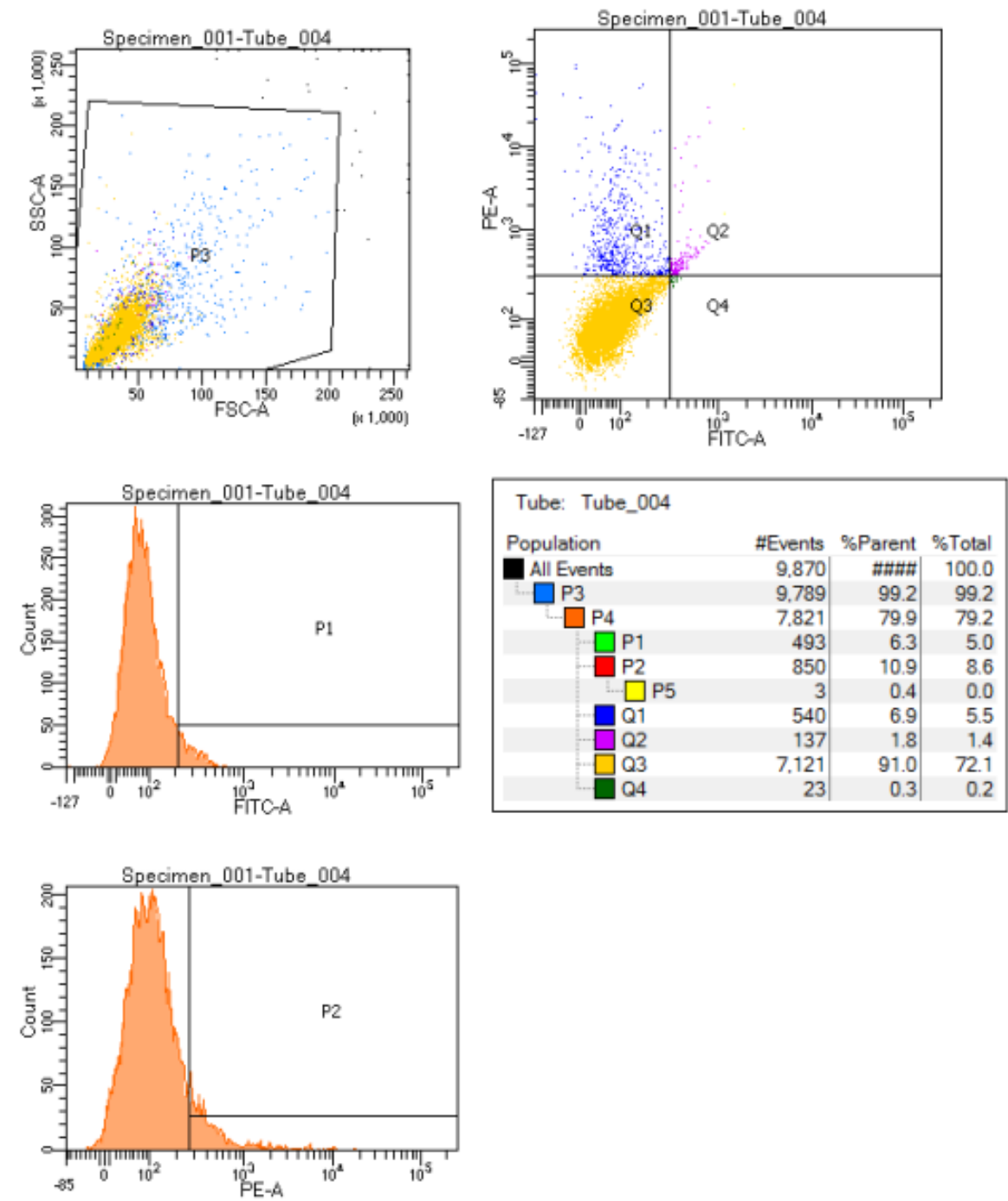
Yellow alone
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.1

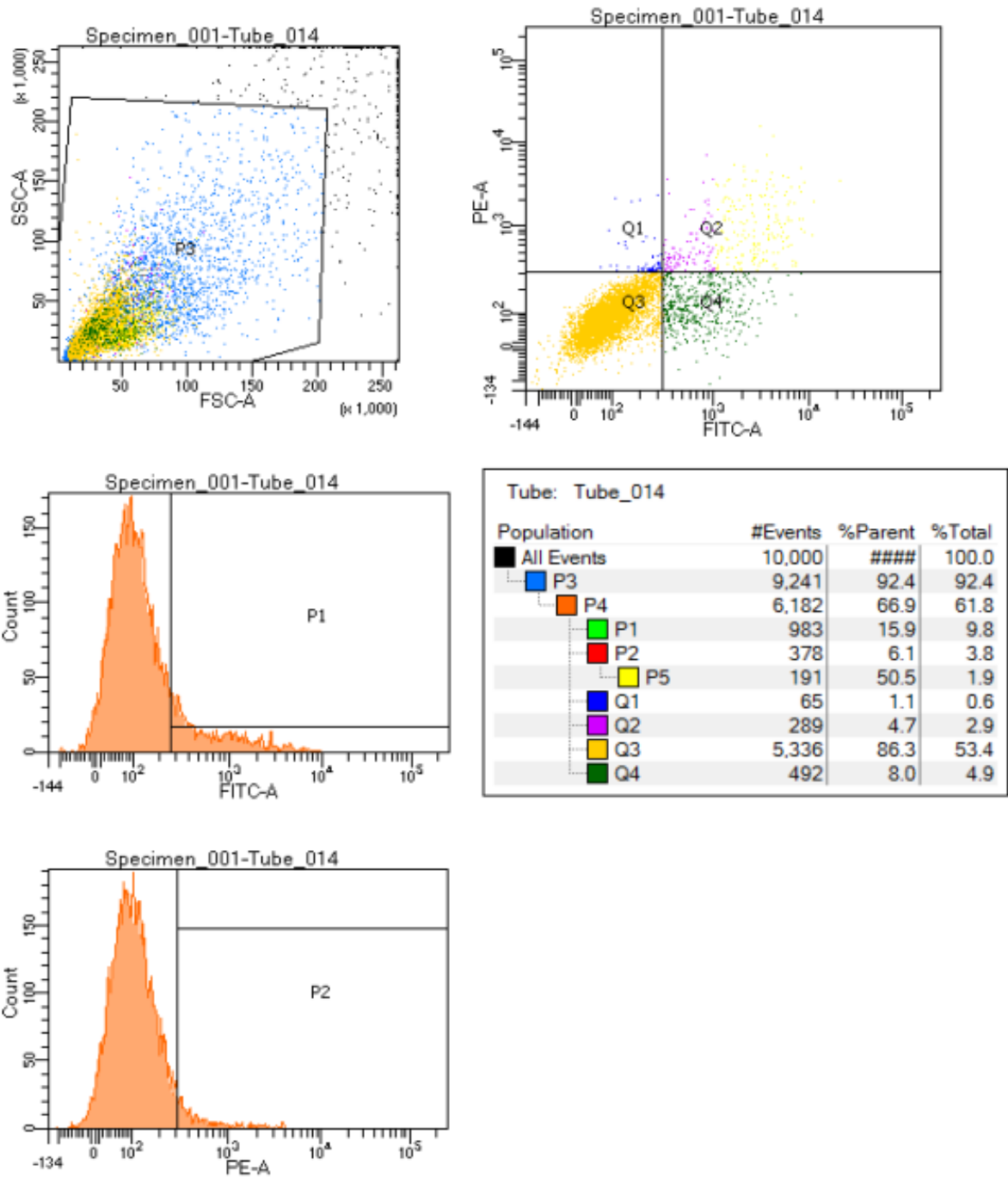
Red alone
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.2

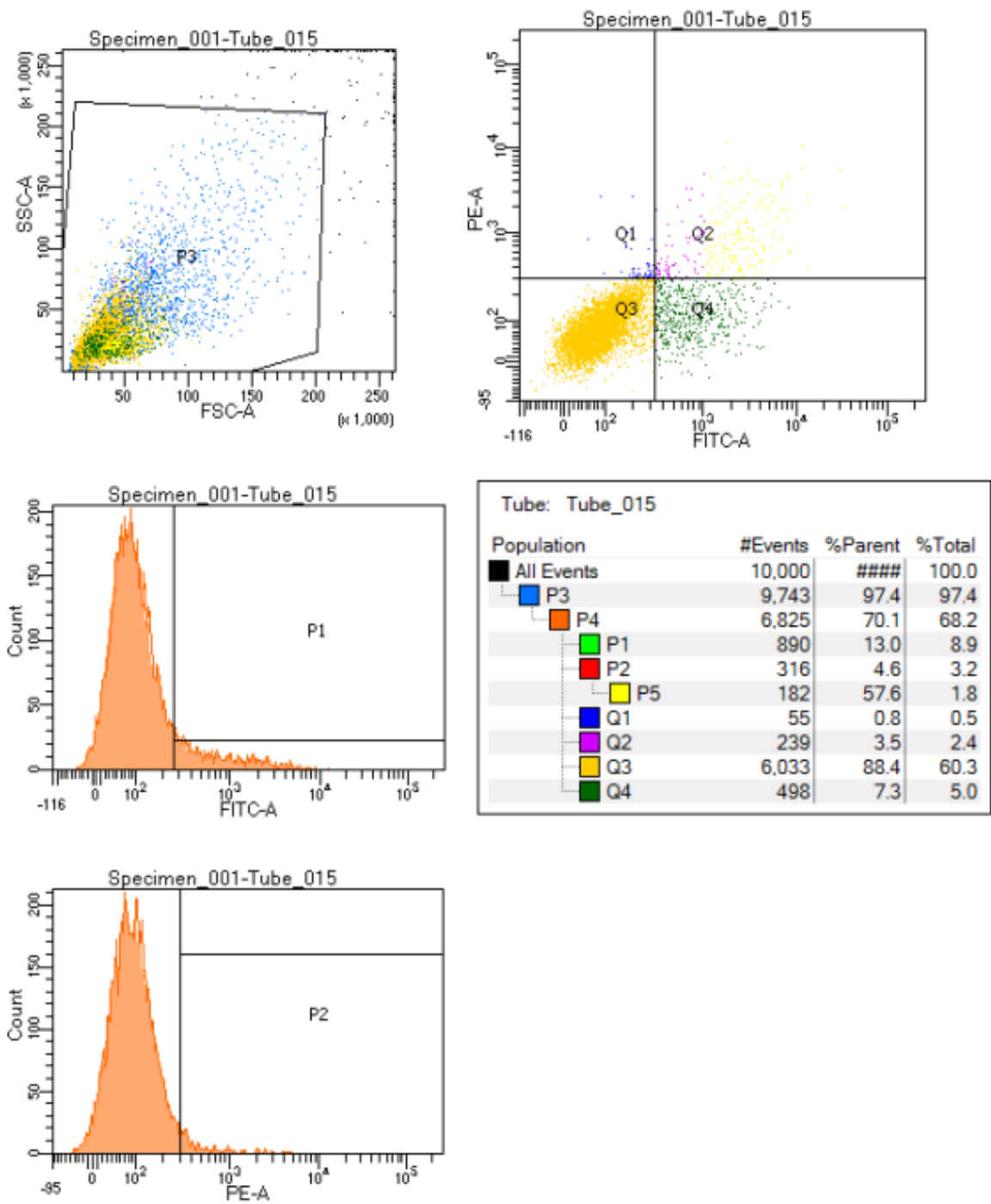
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.2

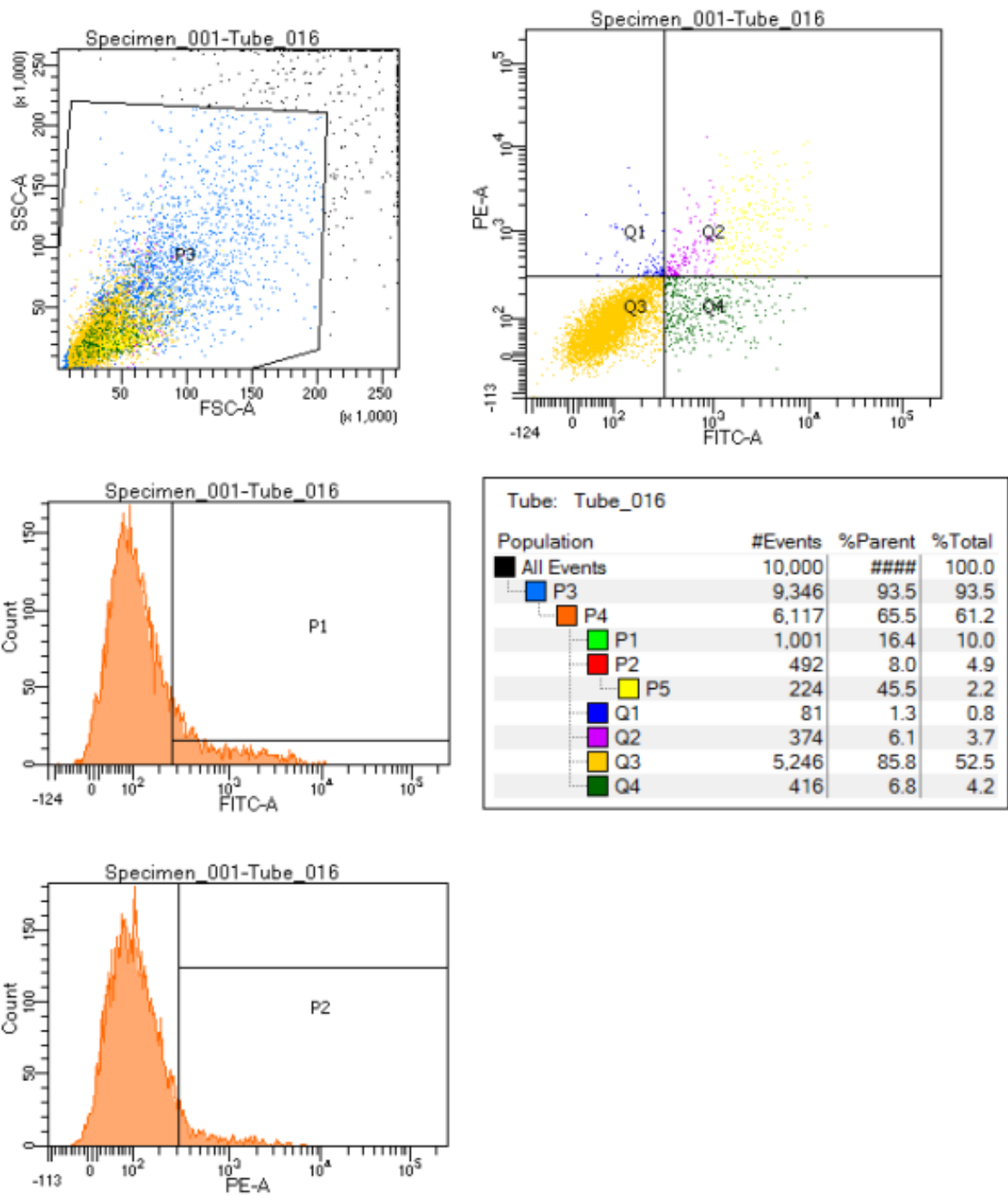
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.2

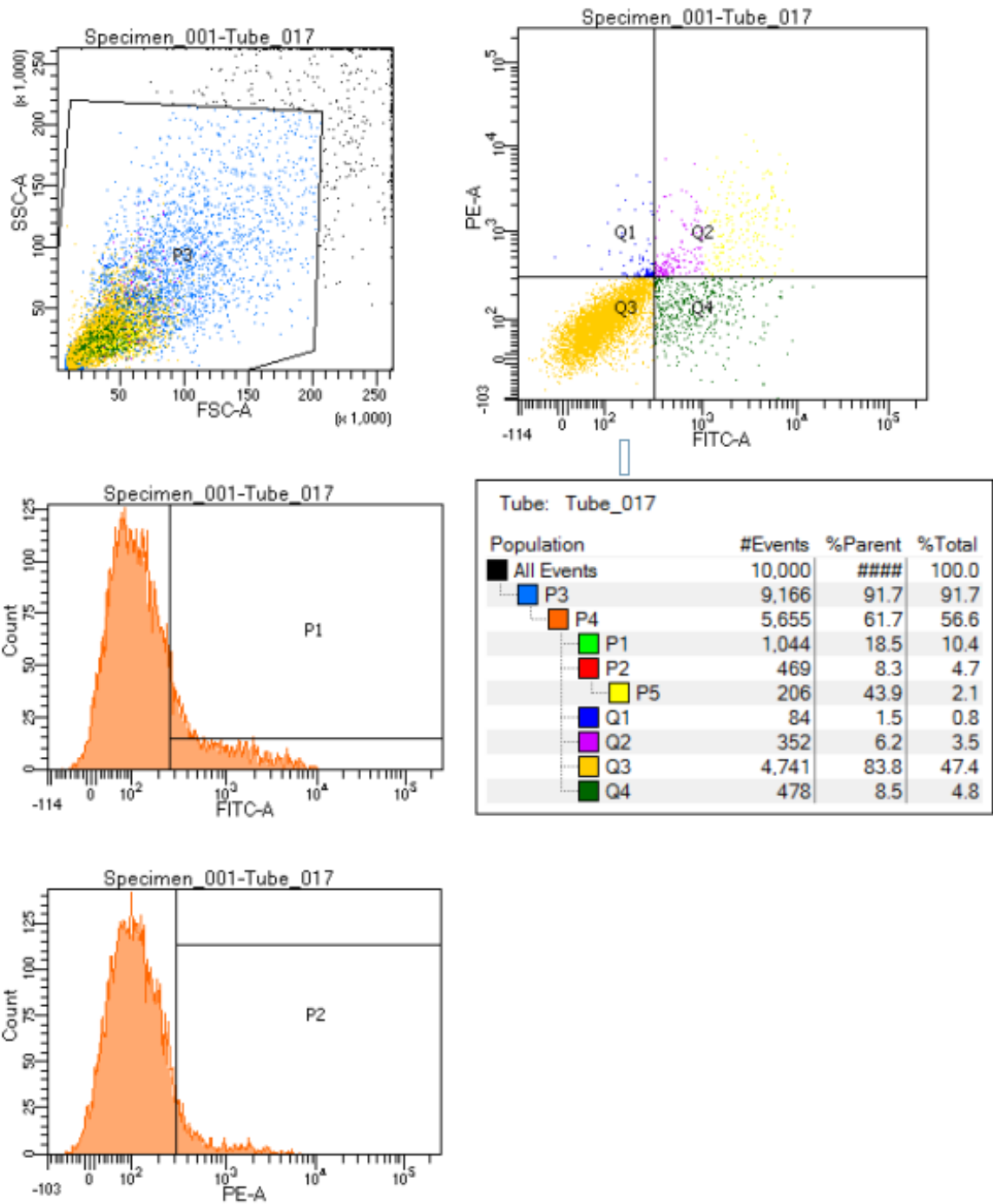
B3 20µM 18hrs
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.2

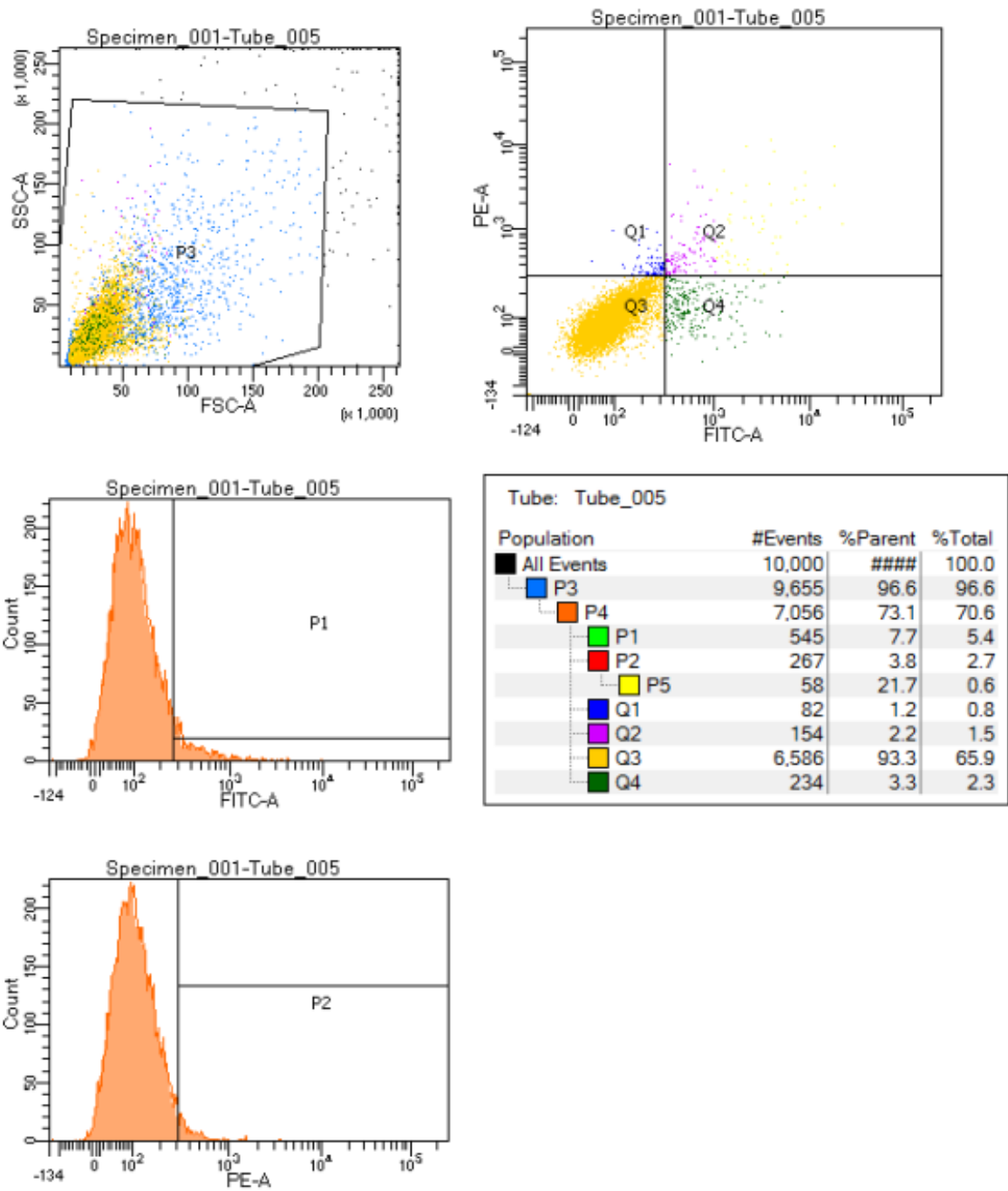
B3 20μM 18hrs
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.2

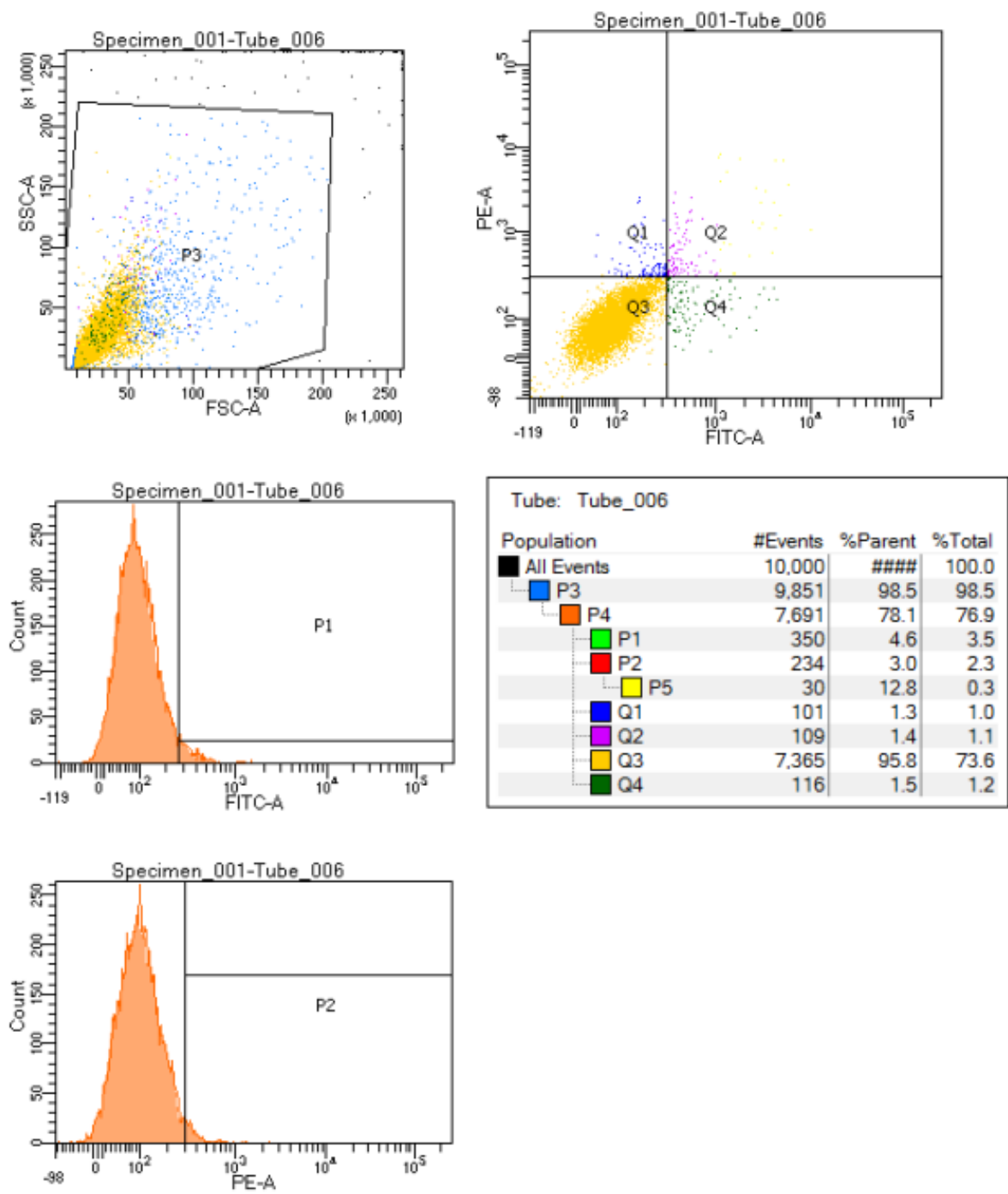
Positive control
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.2

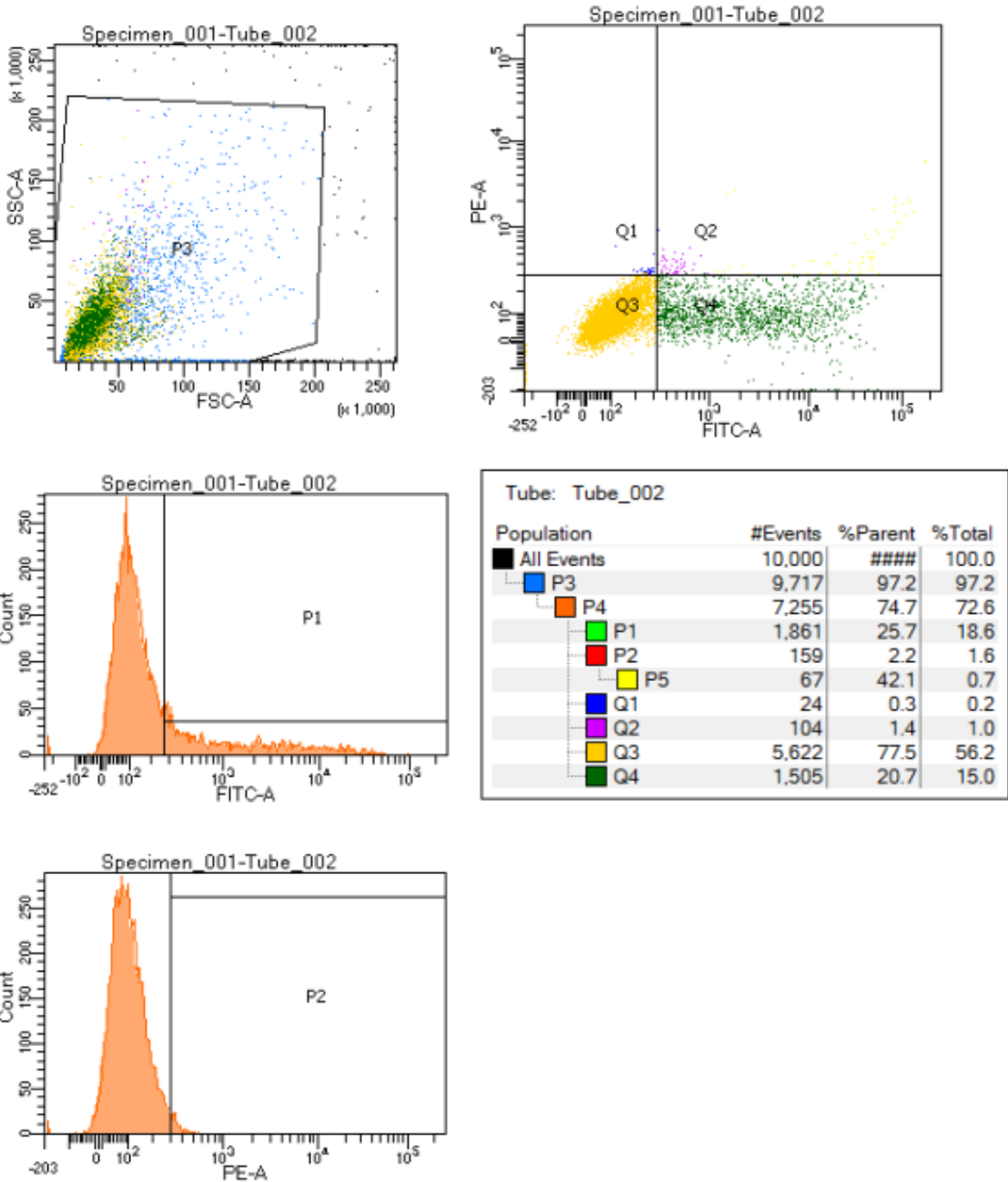
Negative control
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.2

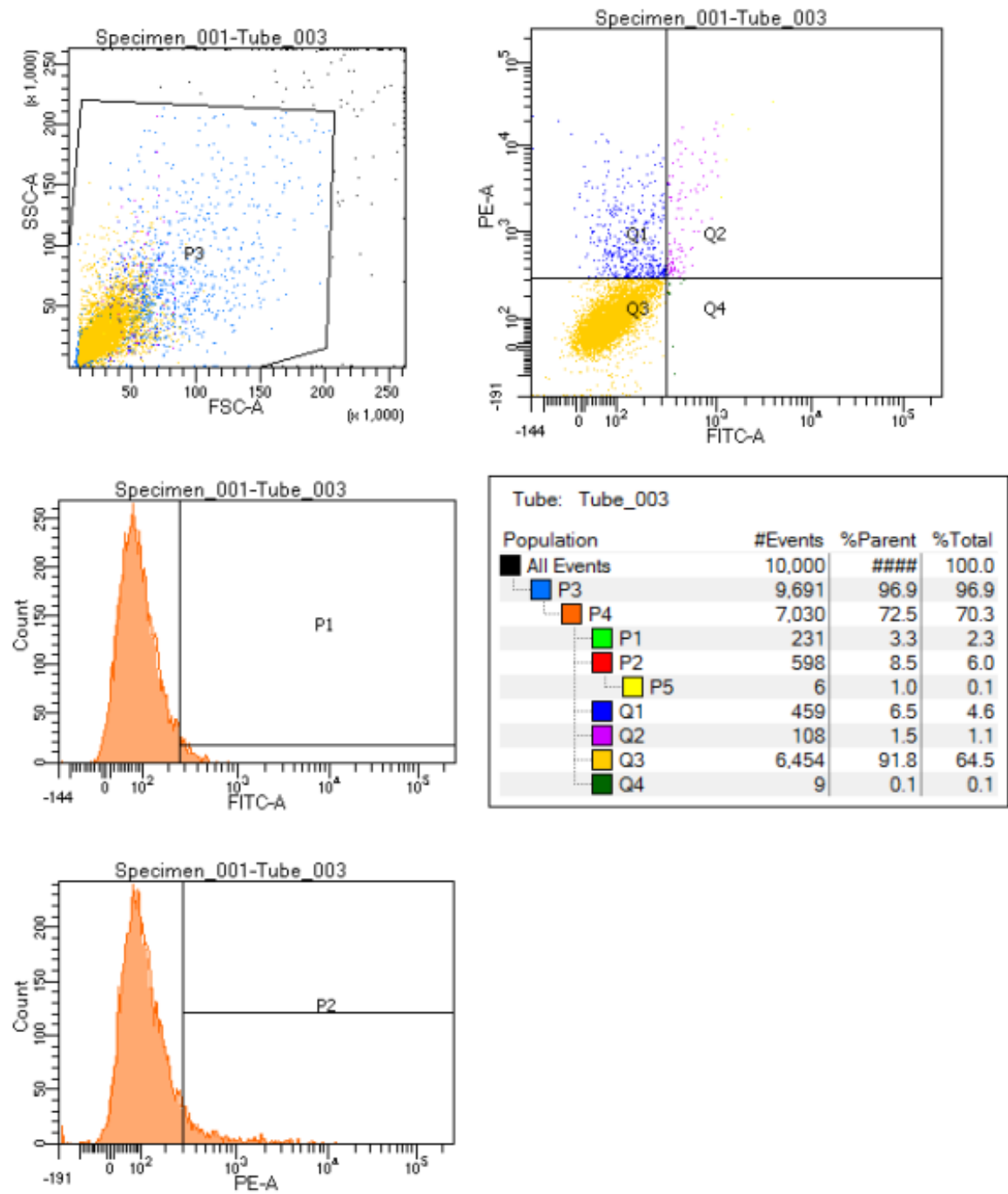
Yellow alone
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.2

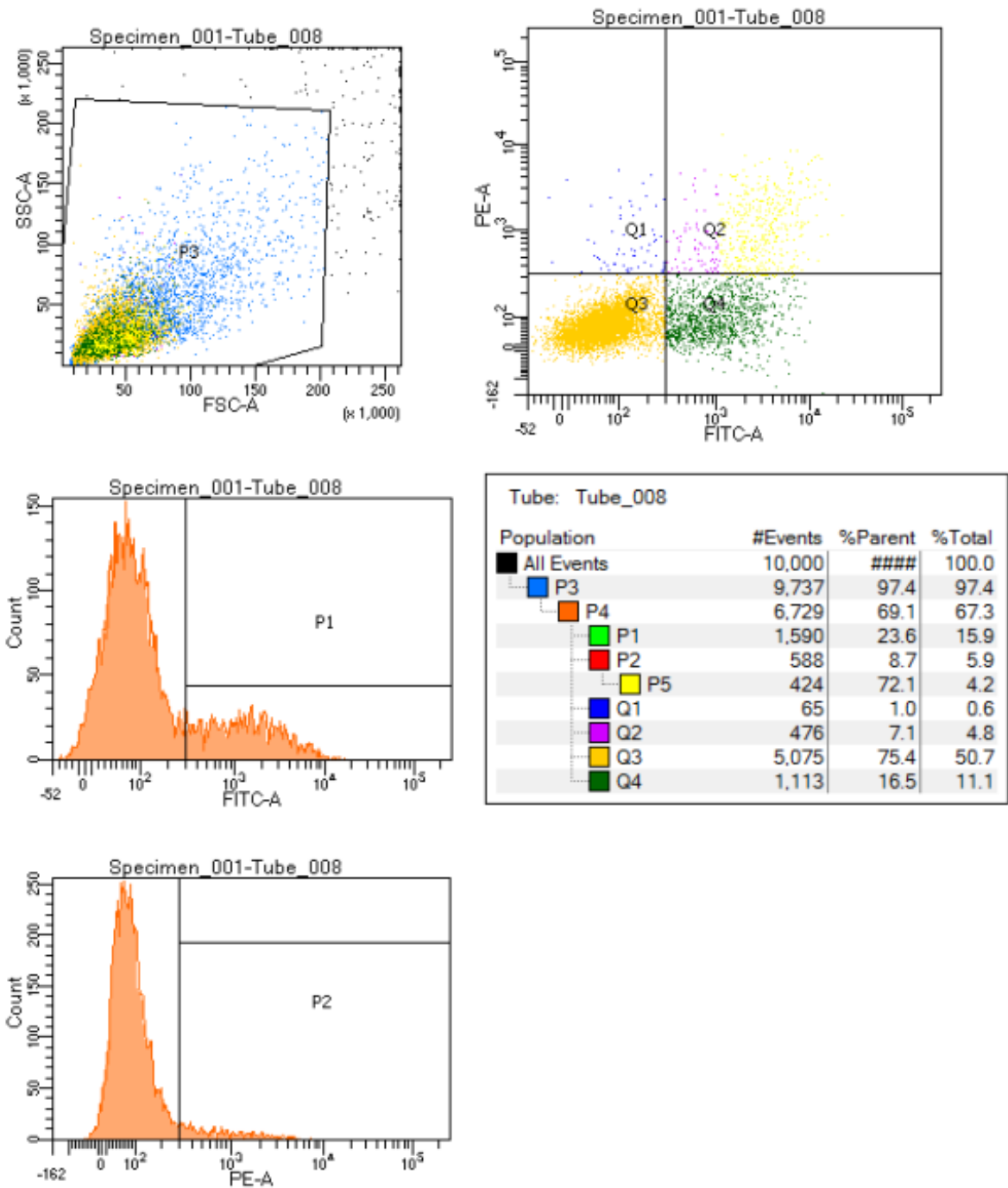
Red alone
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.3

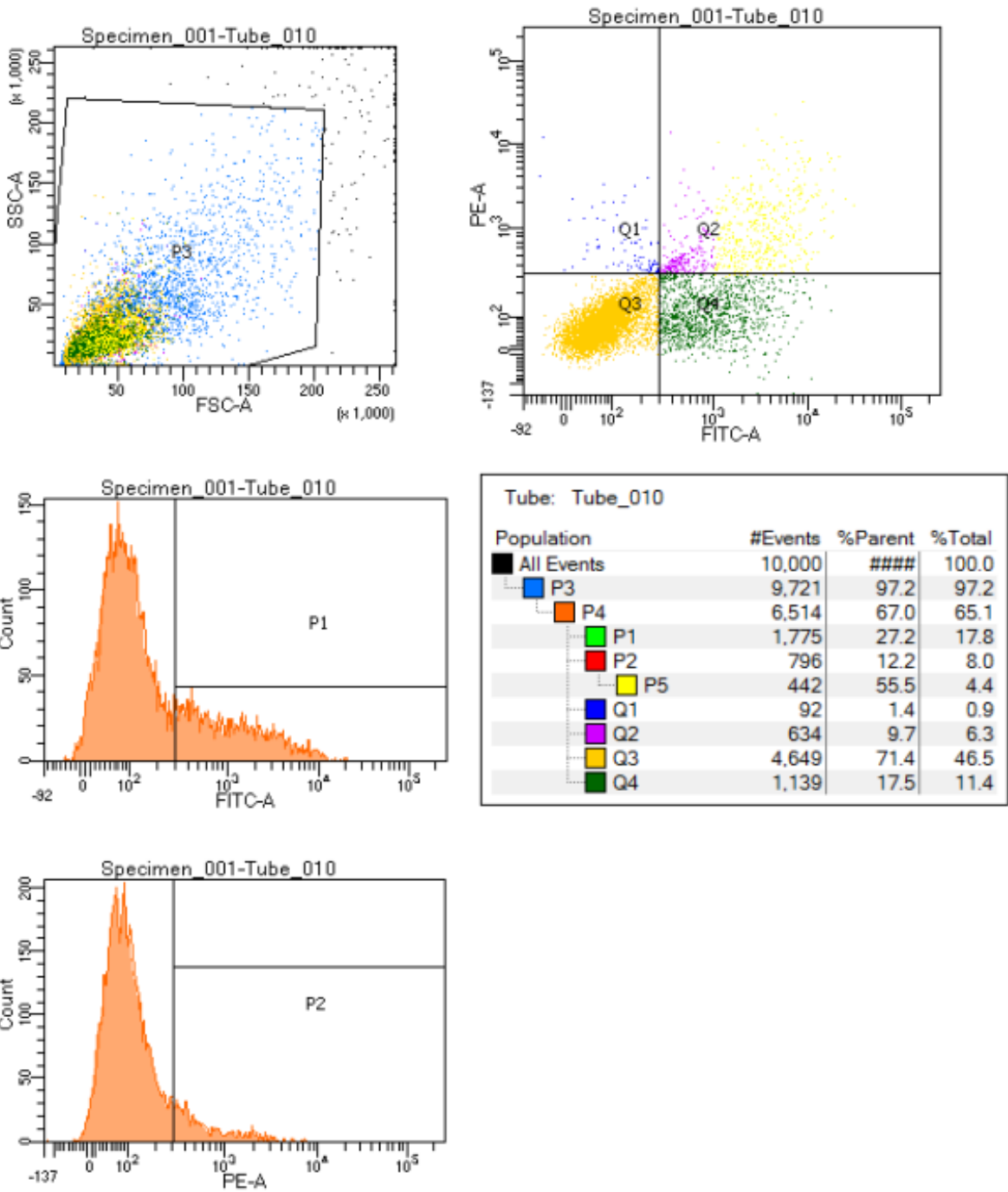
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.3

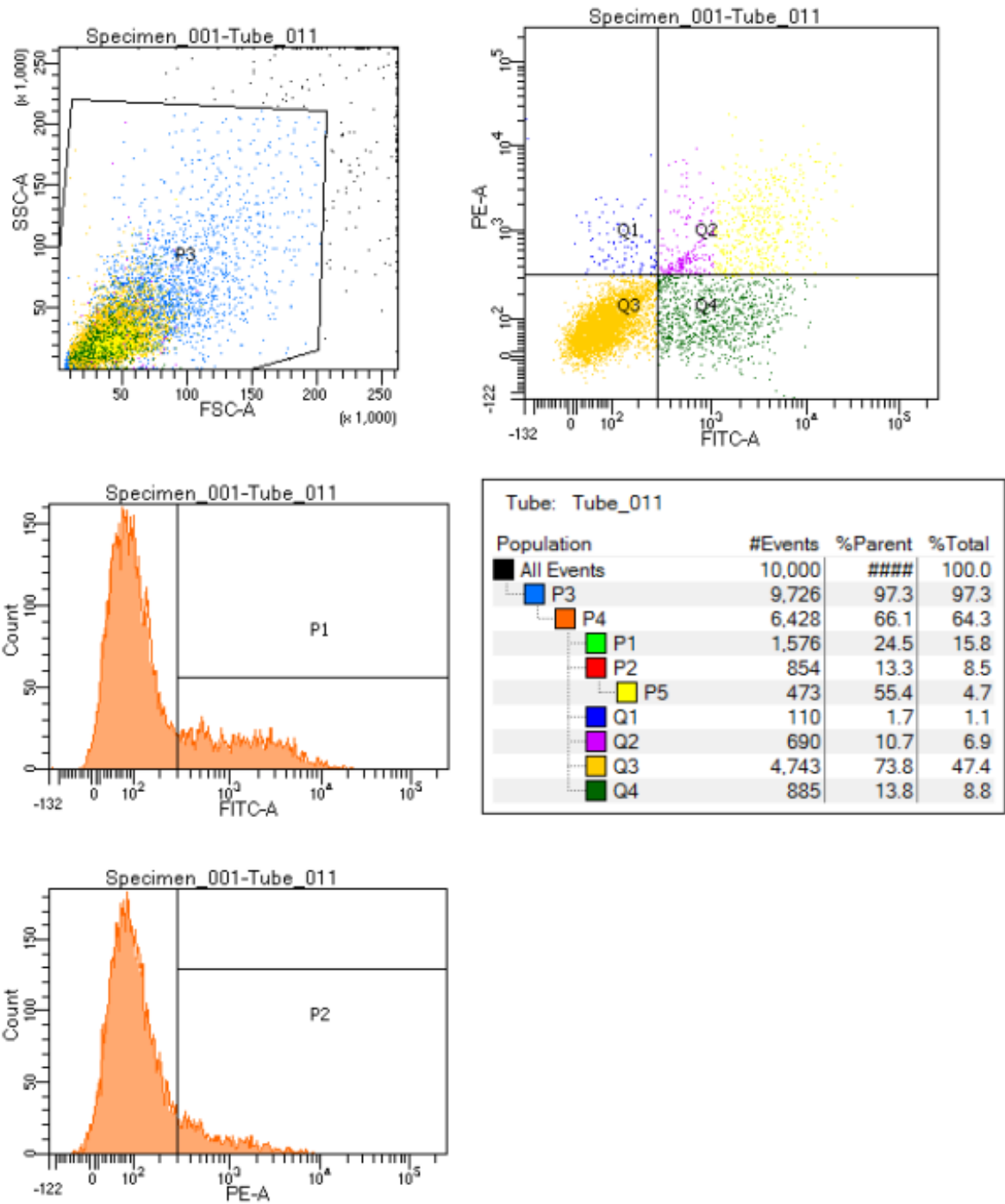
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.3

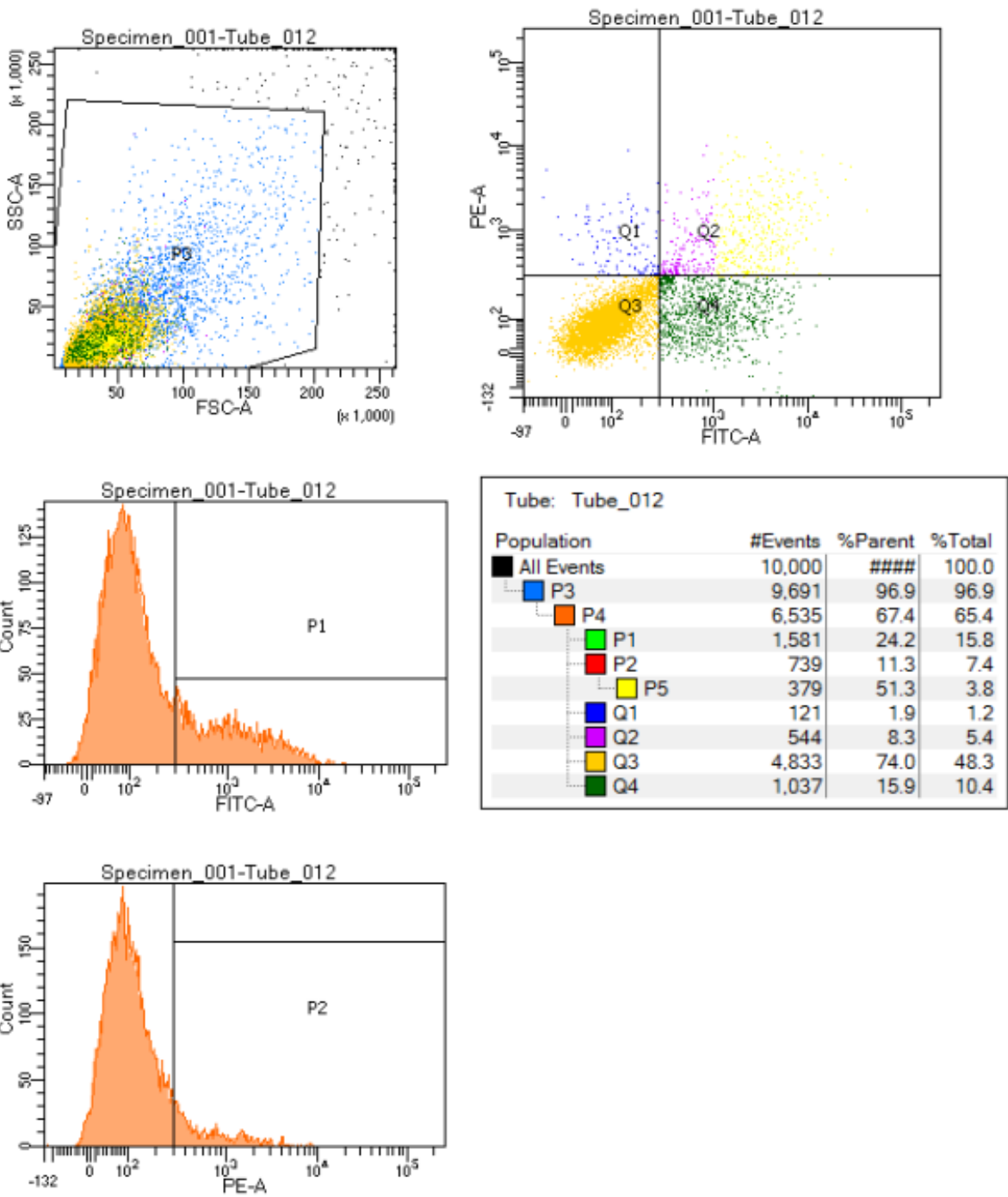
B3 20μM 18hrs
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.3

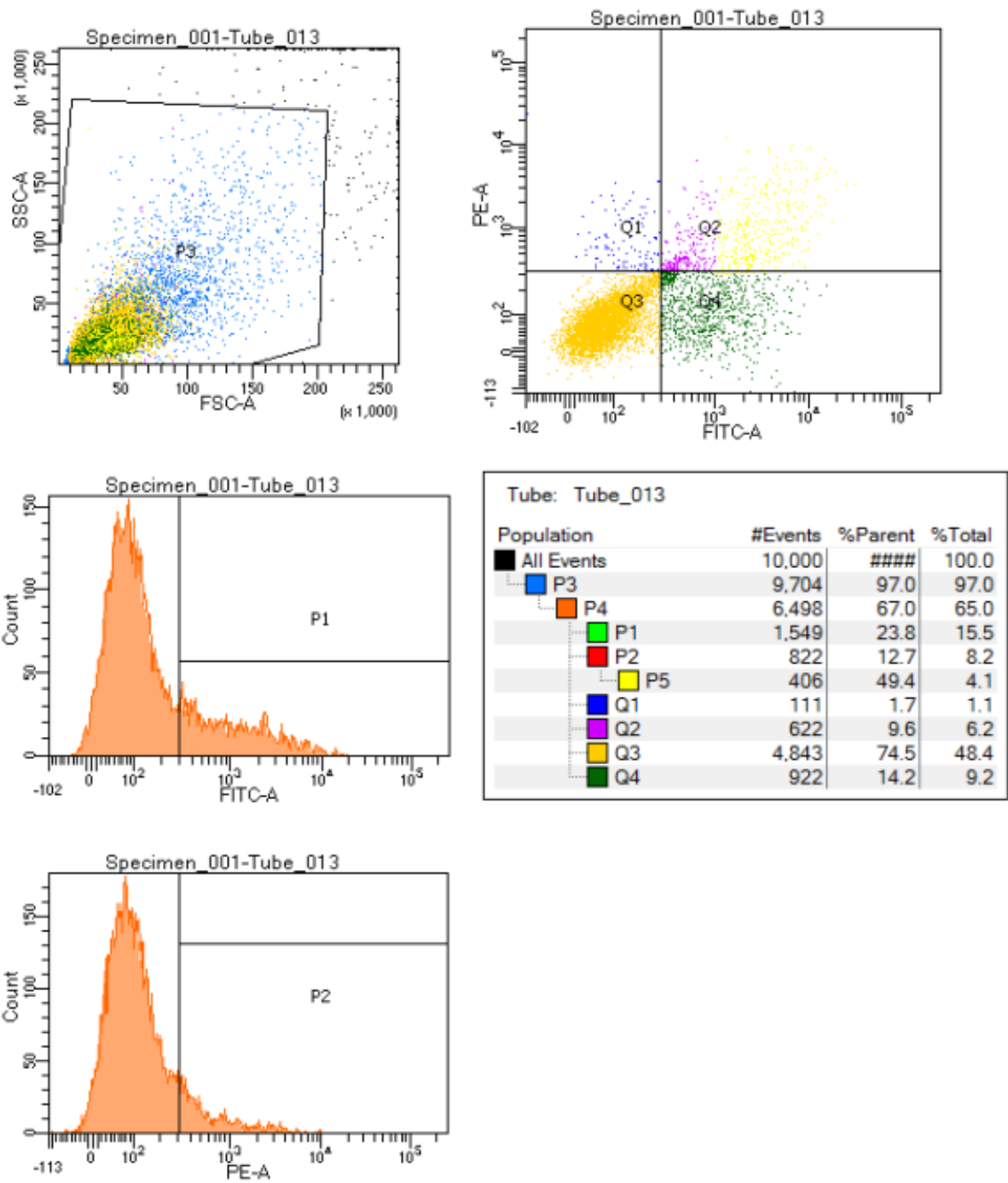
B3 20µM 18hrs
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.3

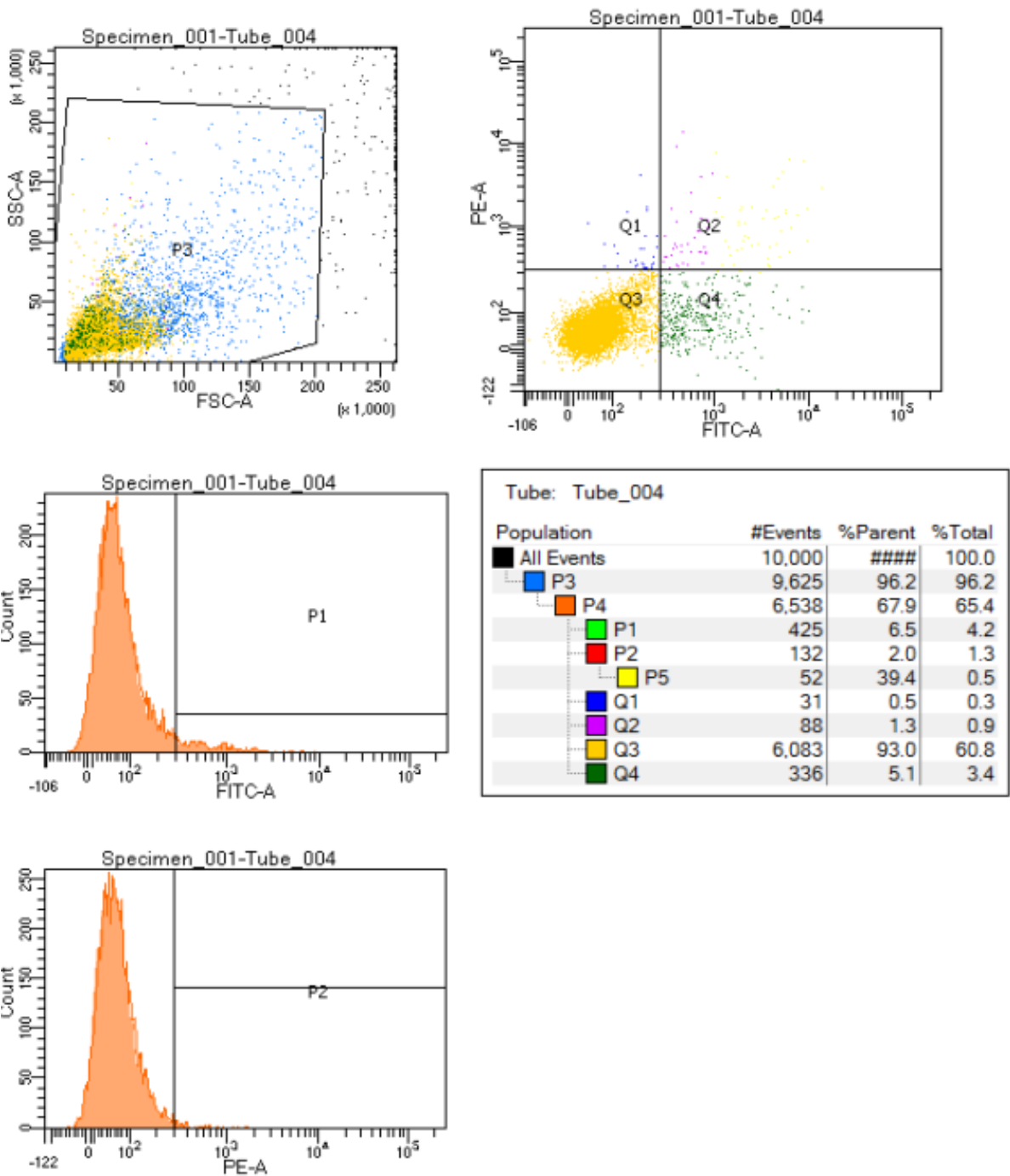
B3 20µM 18hrs
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.3

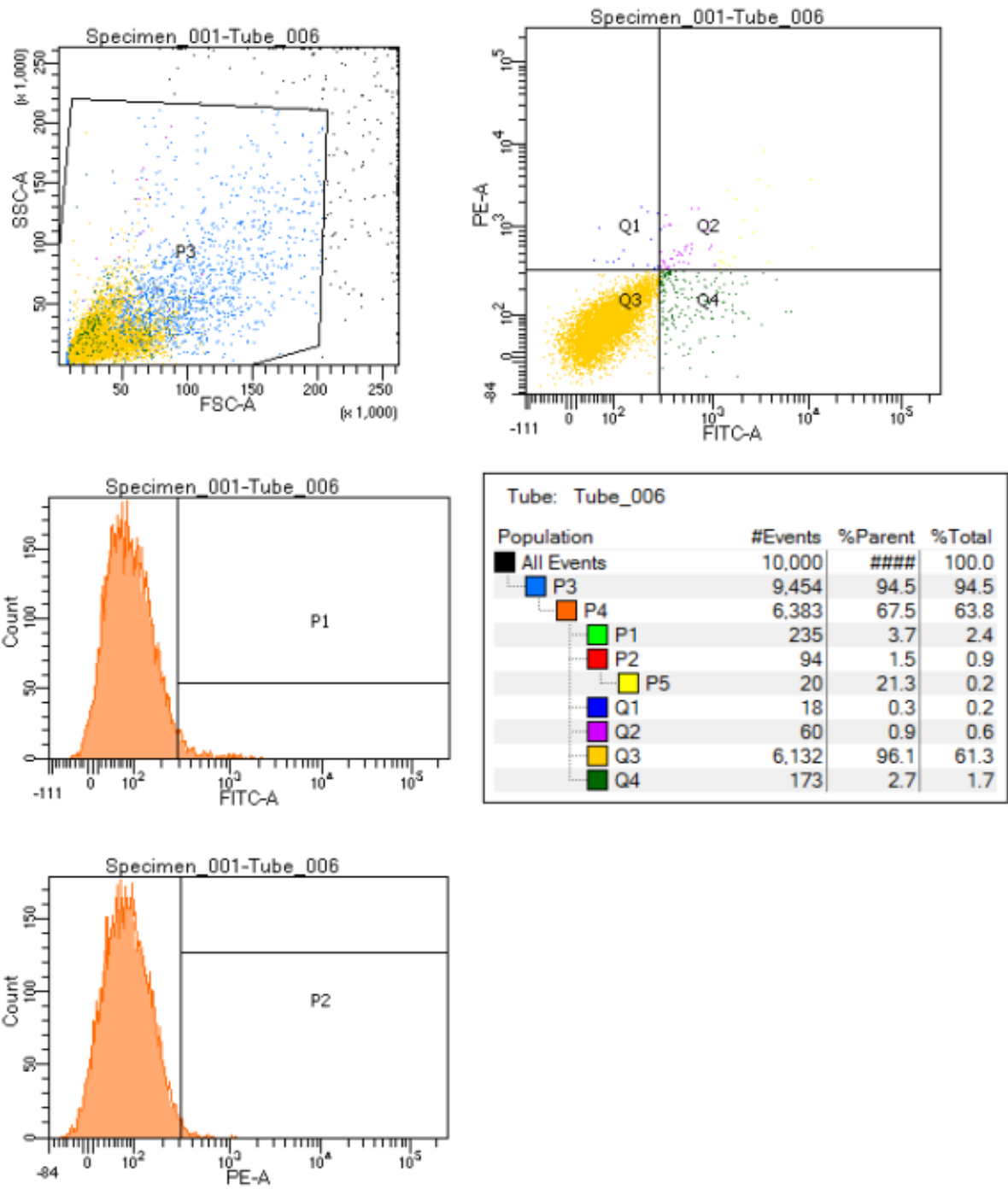
Positive control
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.3

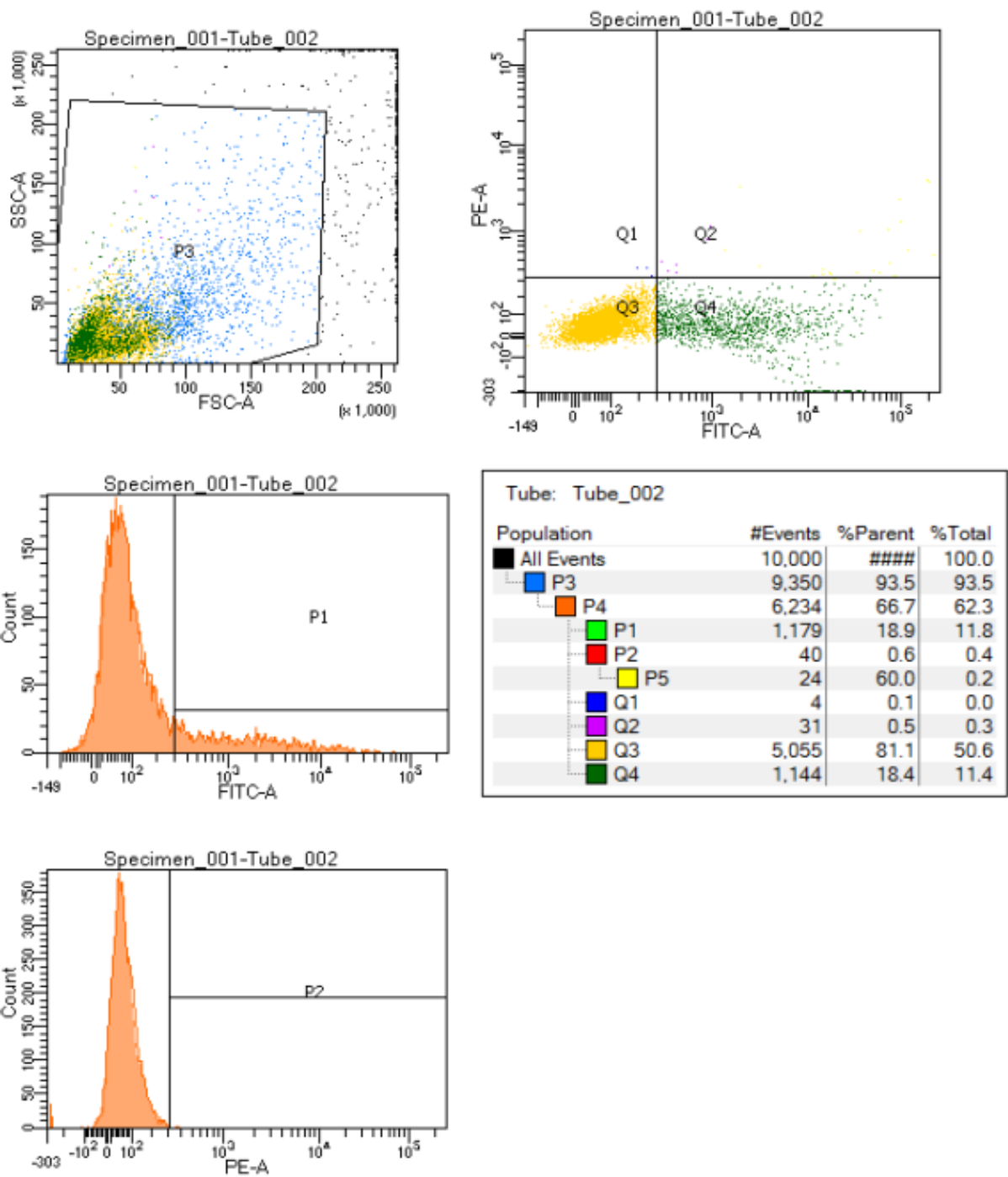
Negative control
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.3

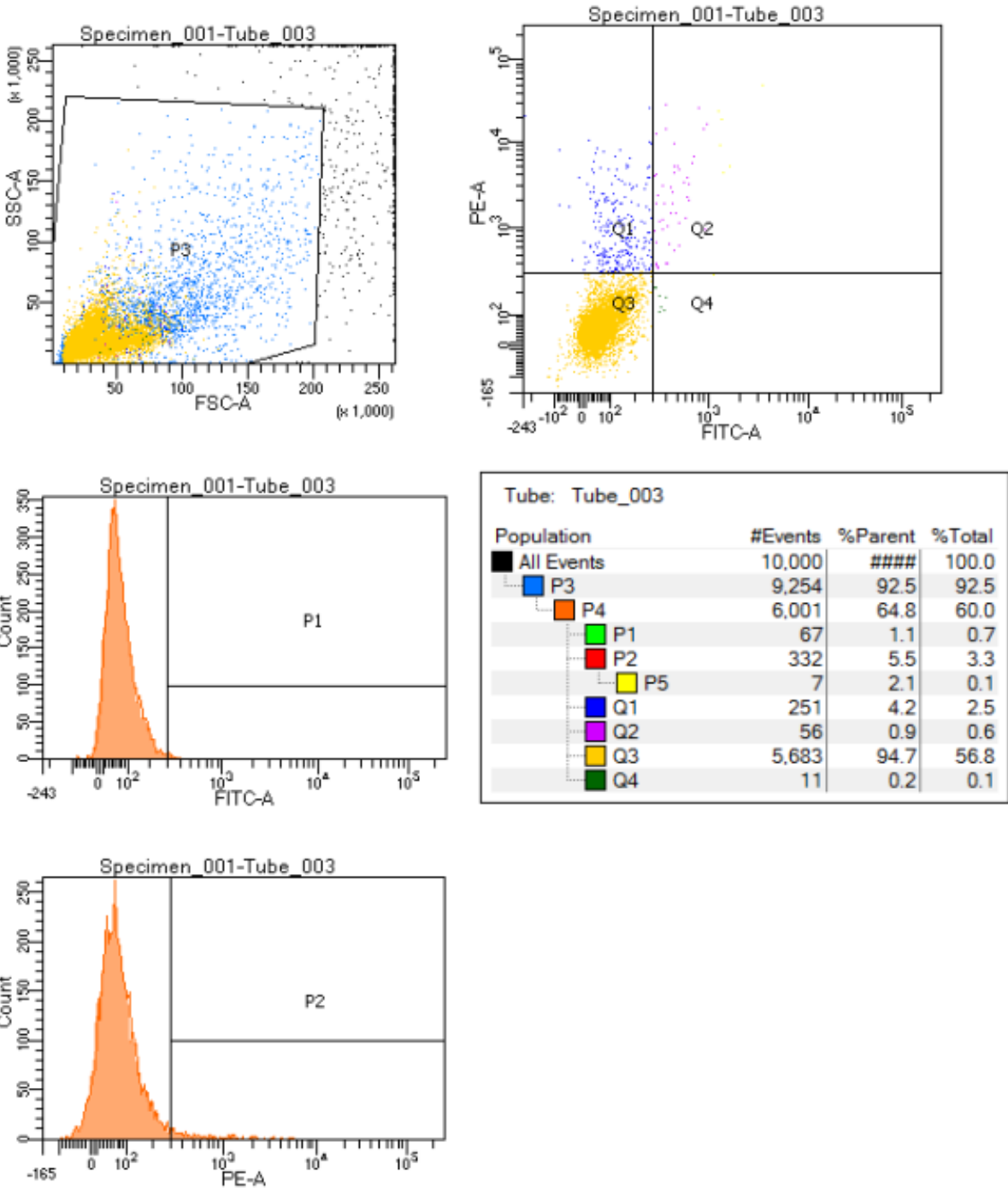
Yellow alone
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.3

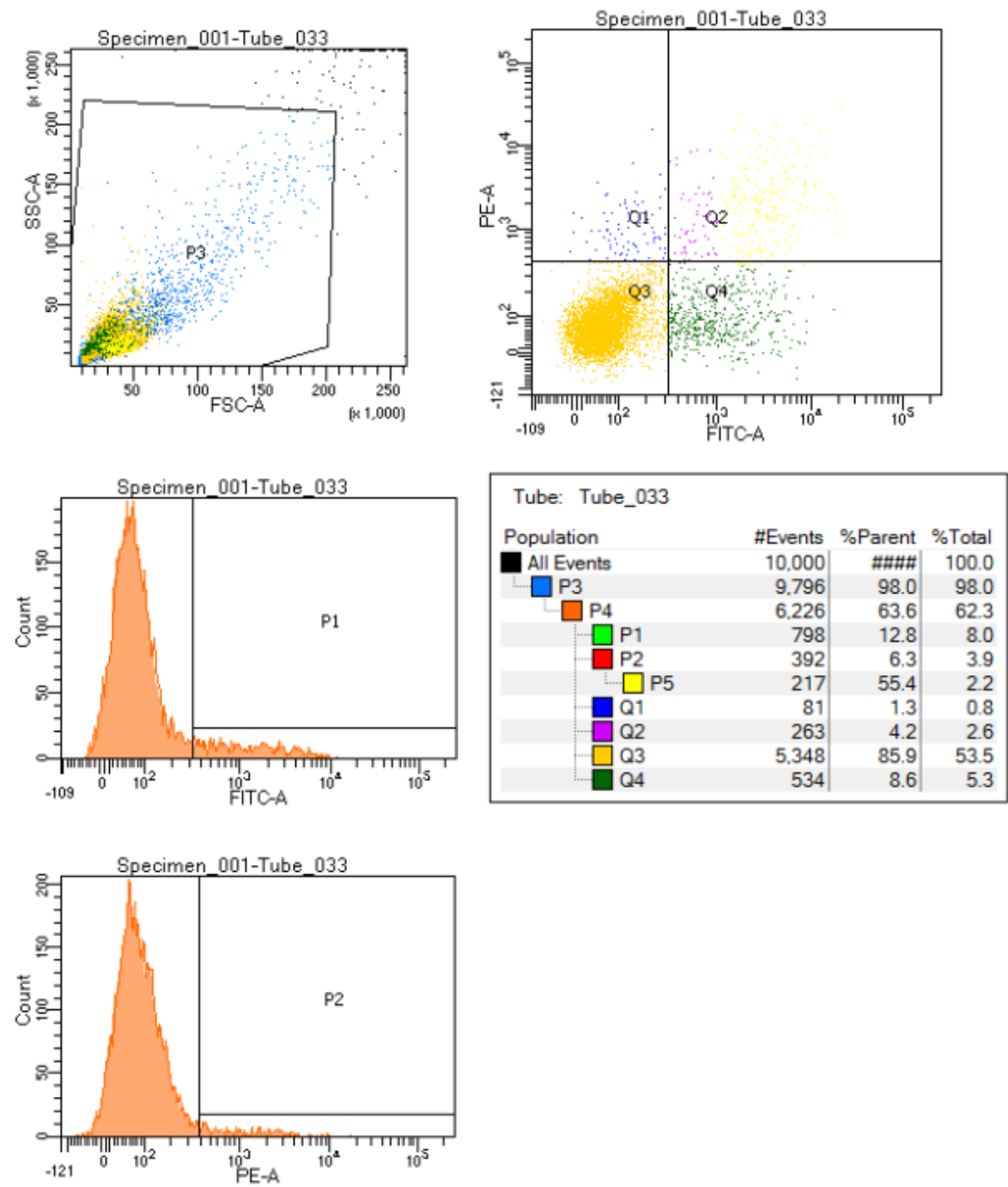
Red alone
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.4

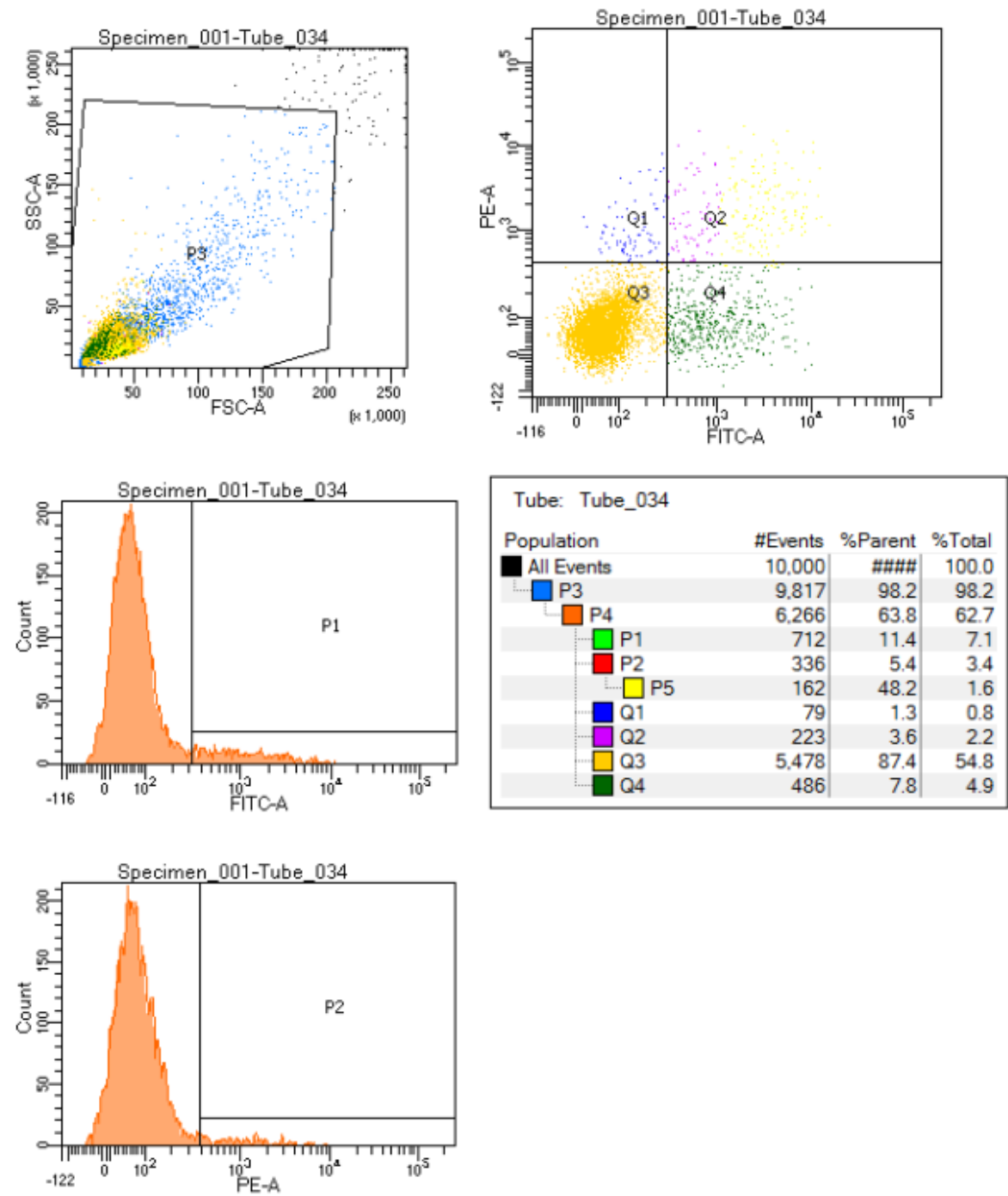
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.4

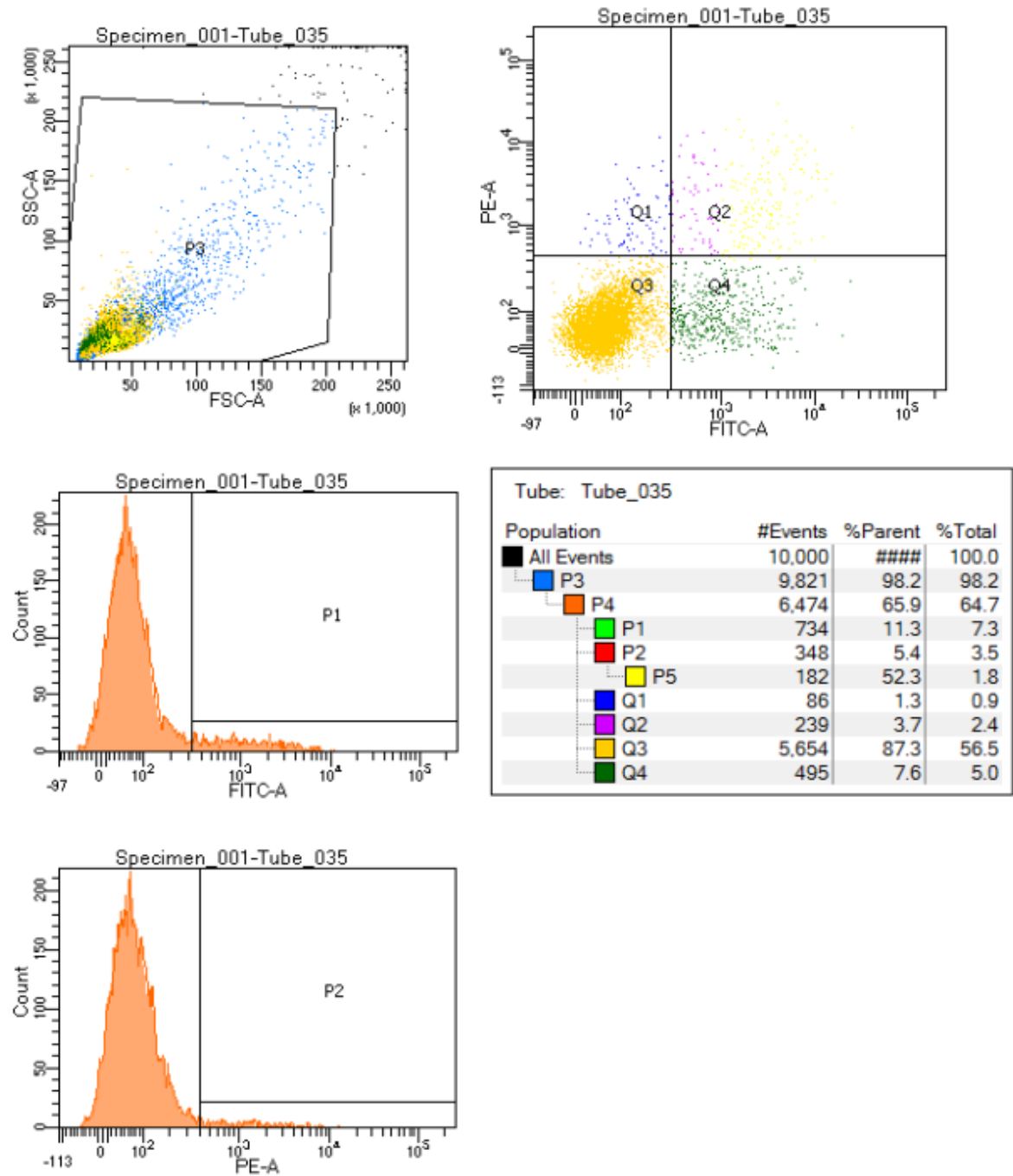
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.4

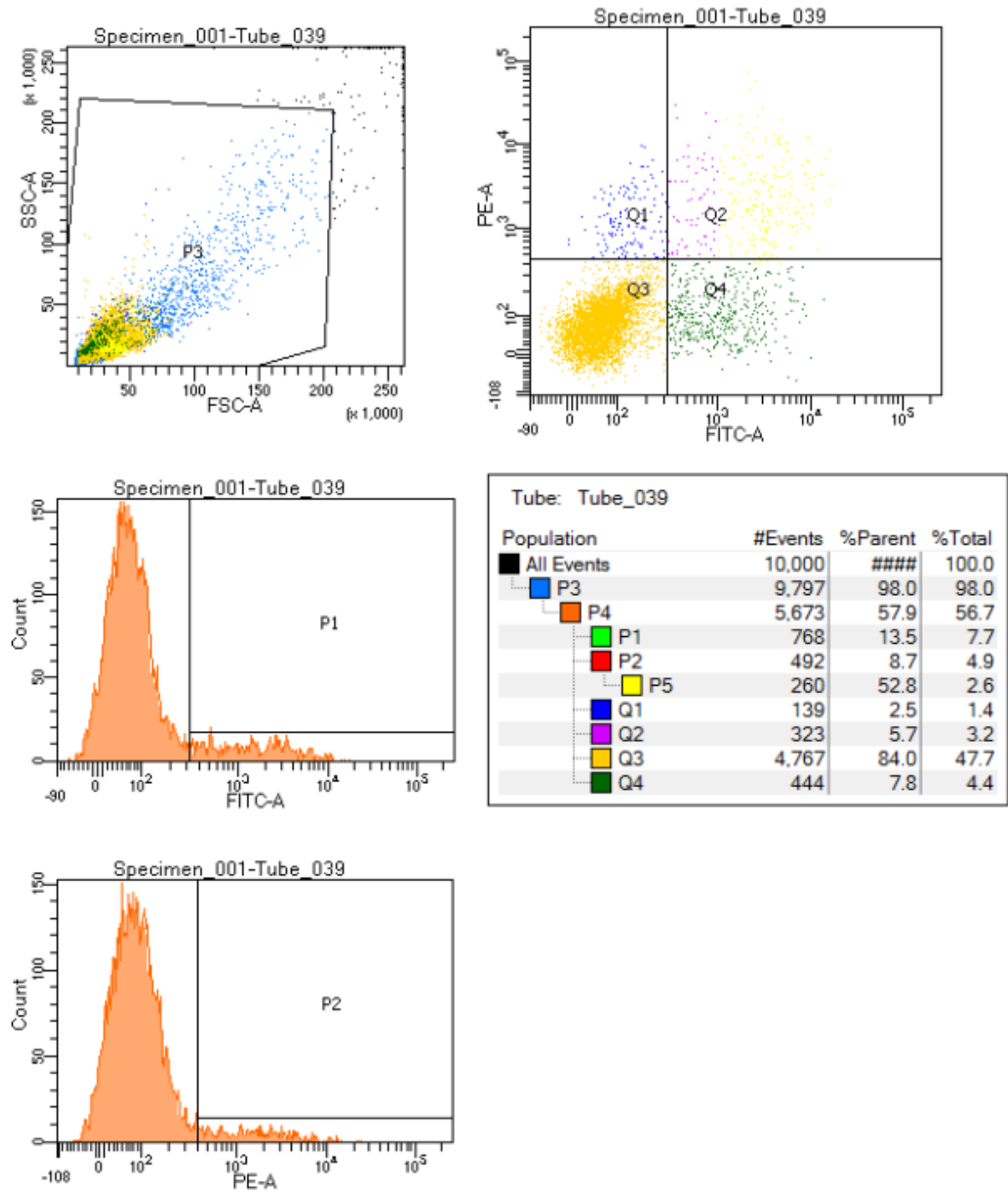
Control-DMSO
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.4

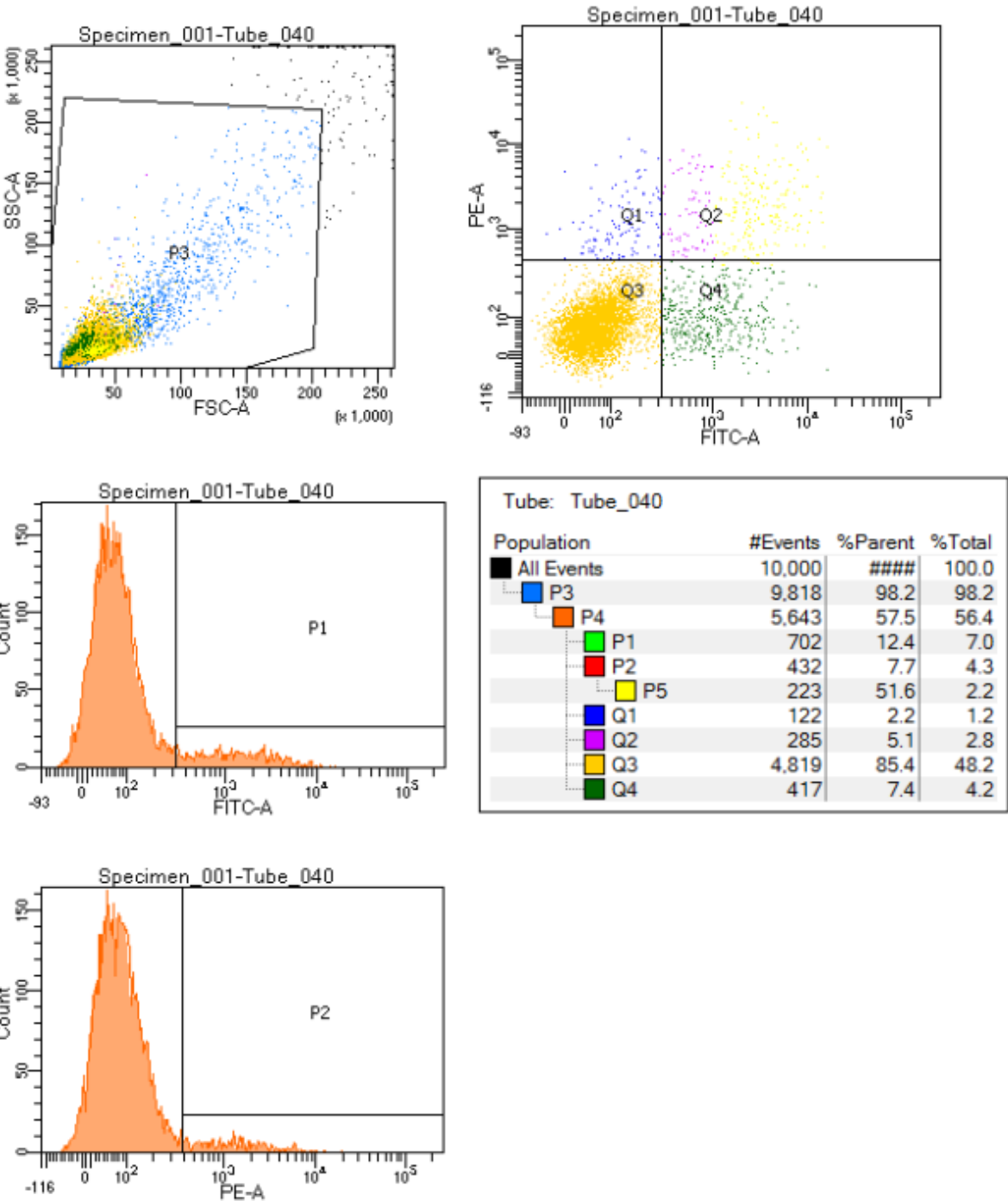
B3 20μM 18hrs
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.4

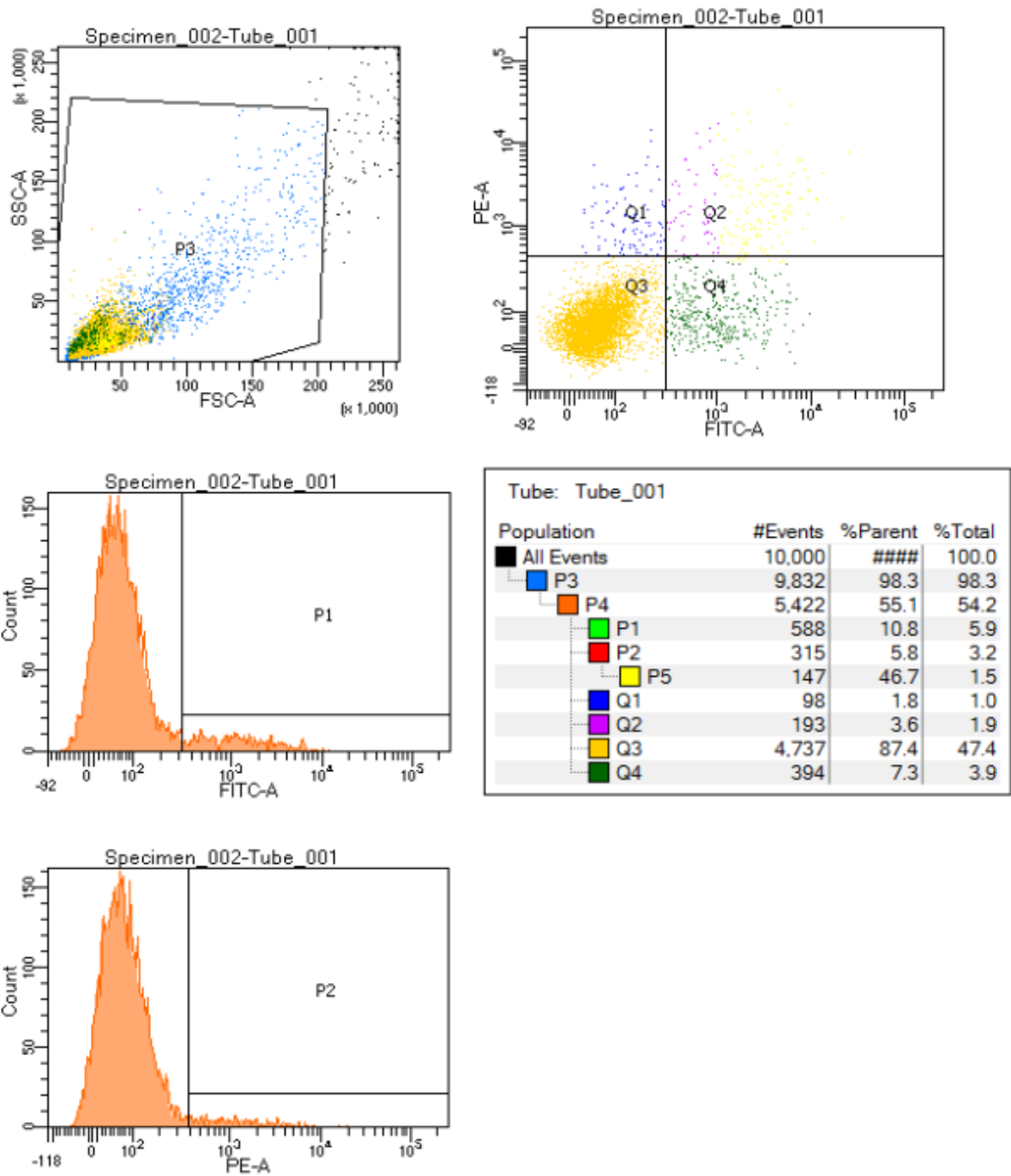
B3 20μM 18hrs
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.4

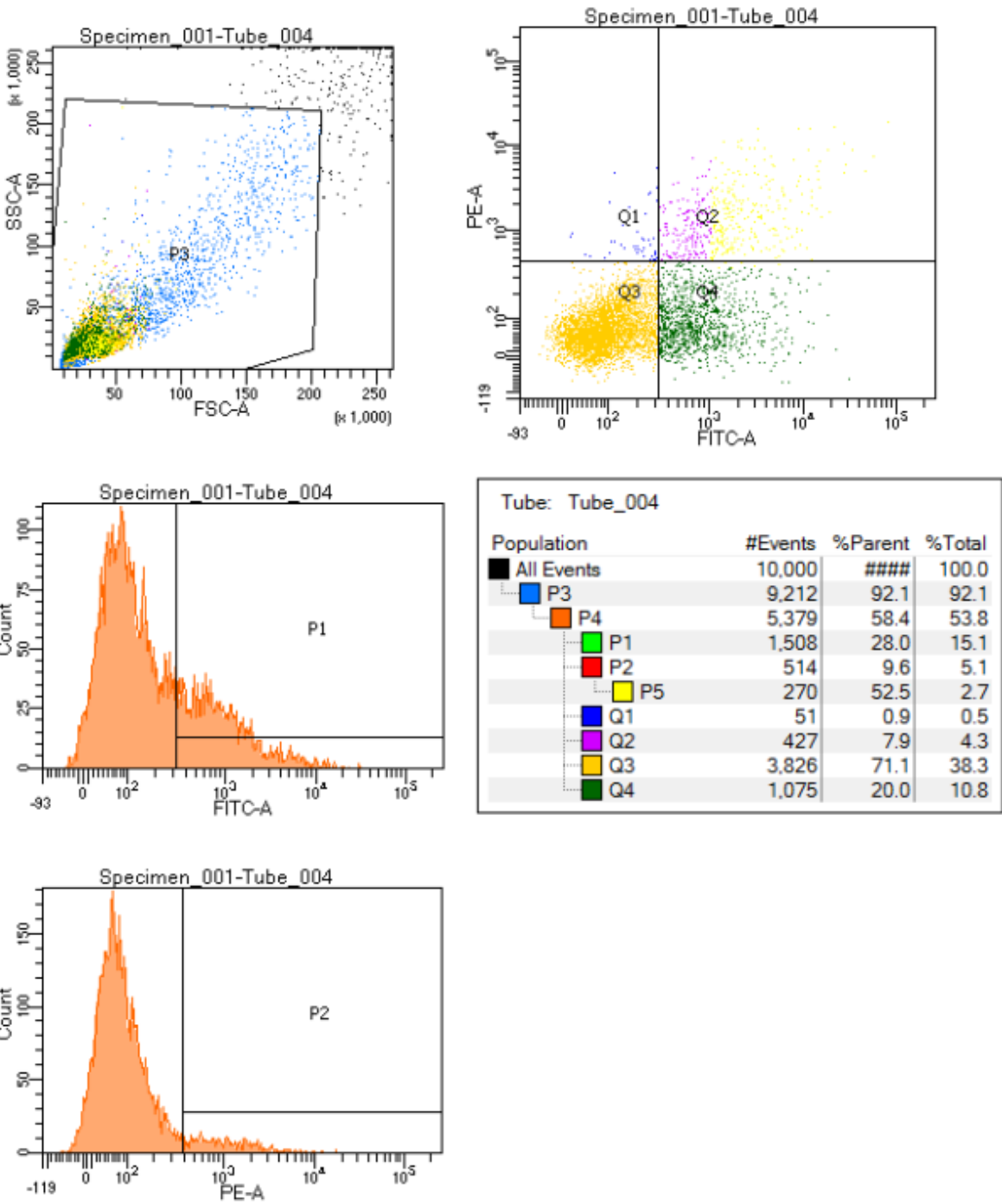
B3 20µM 18hrs
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.4

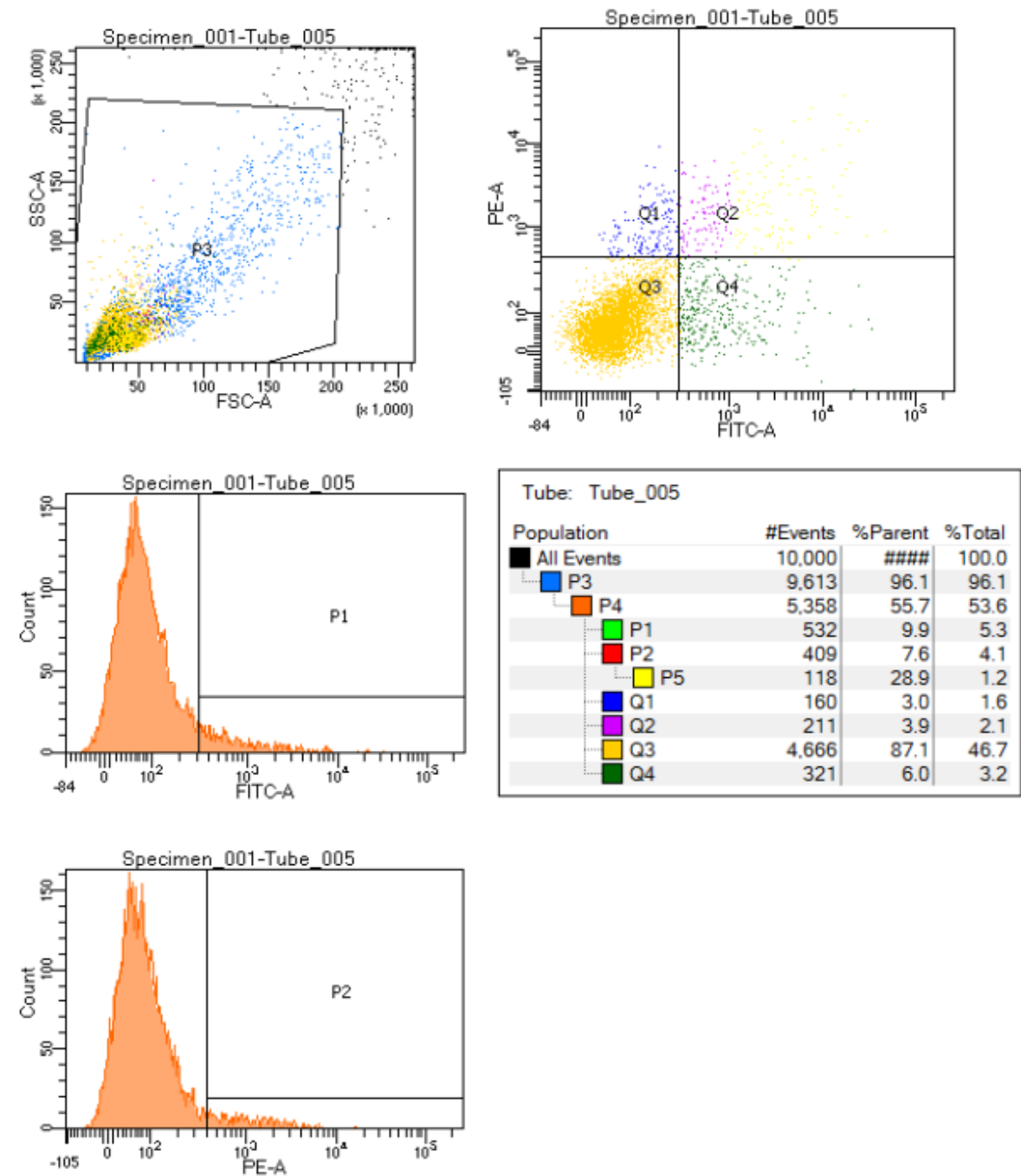
Positive control
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.4

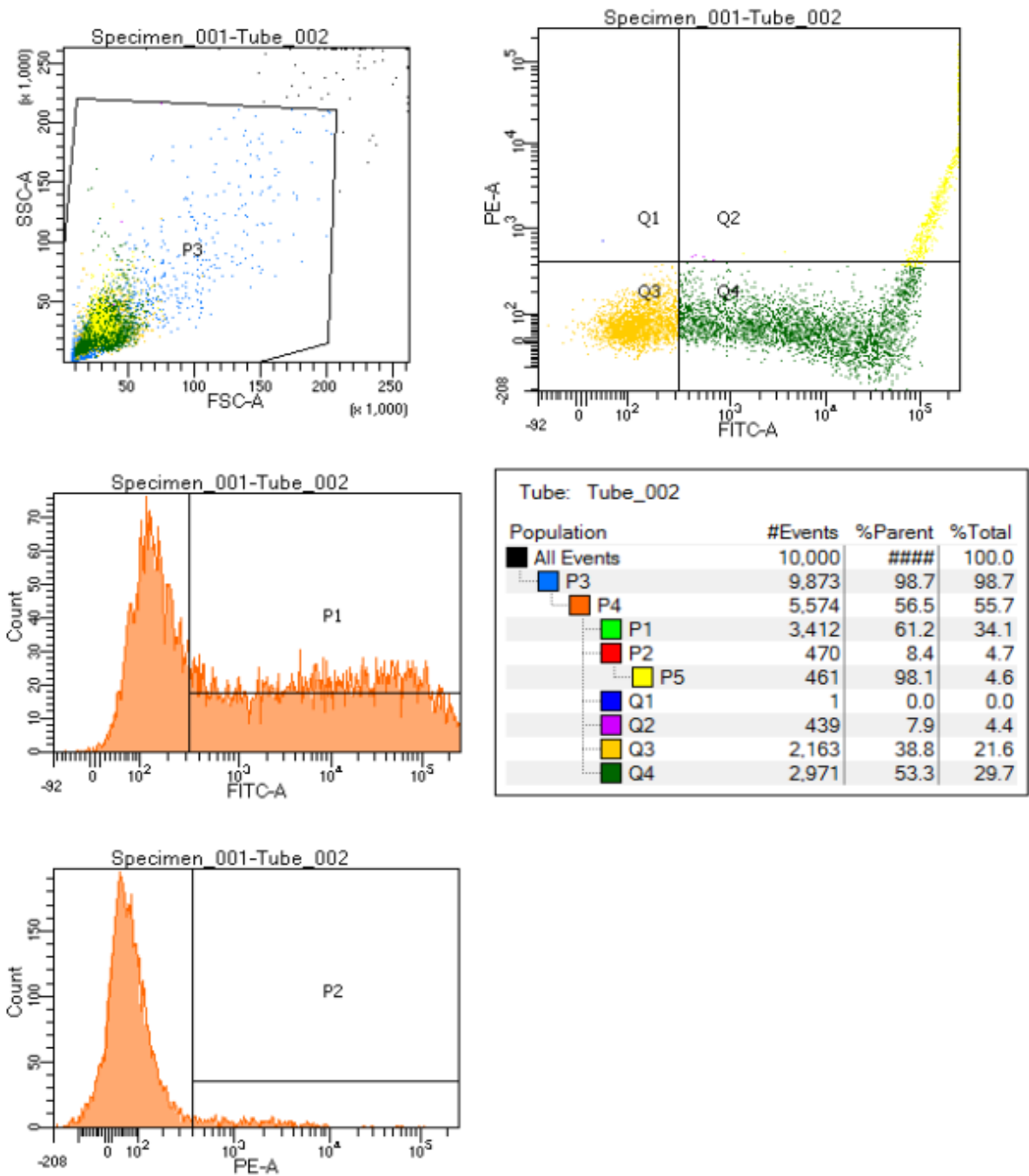
Negative control
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.4

Yellow alone
BD FACSDiva 8.0.1



Supplementary figure 4

Repeat.4

Red alone
BD FACSDiva 8.0.1

