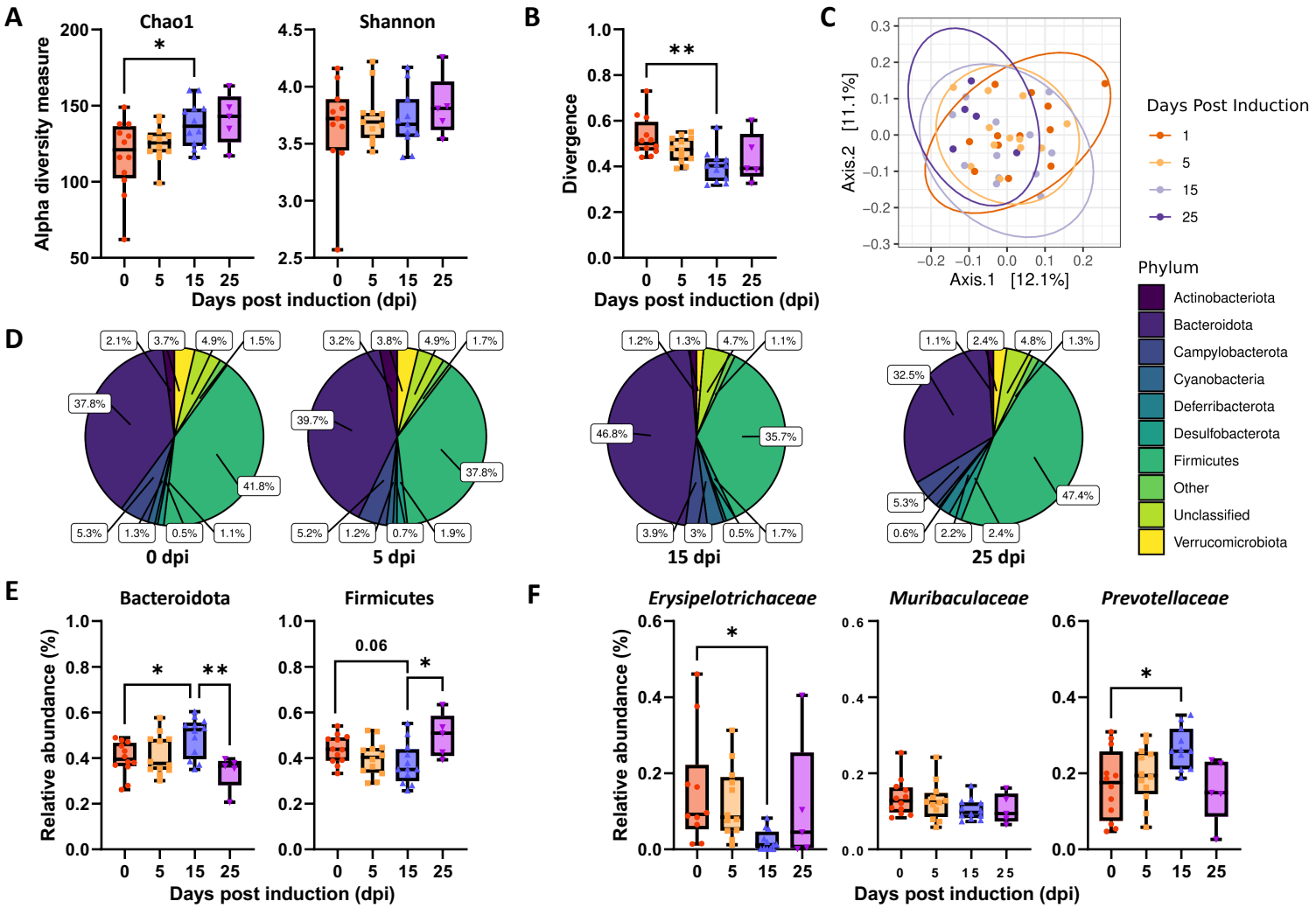
A
Chao1
Shannon
Alpha diversity measure
Days post induction (dpi)
B
Divergence
Days post induction (dpi)
C
Axis.2 [11.1%]
Axis.1 [12.1%]
Days Post Induction
1
5
15
25
Phylum
Actinobacteriota
Bacteroidota
Campylobacterota
Cyanobacteria
Deferribacterota
Desulfobacterota
Firmicutes
Other
Unclassified
Verrucomicrobiota
D
0 dpi
5 dpi
15 dpi
25 dpi
E
Bacteroidota
Firmicutes
Relative abundance (%)
Days post induction (dpi)
F
Erysipelotrichaceae
Muribaculaceae
Prevotellaceae
Relative abundance (%)
Days post induction (dpi)

Figure S1

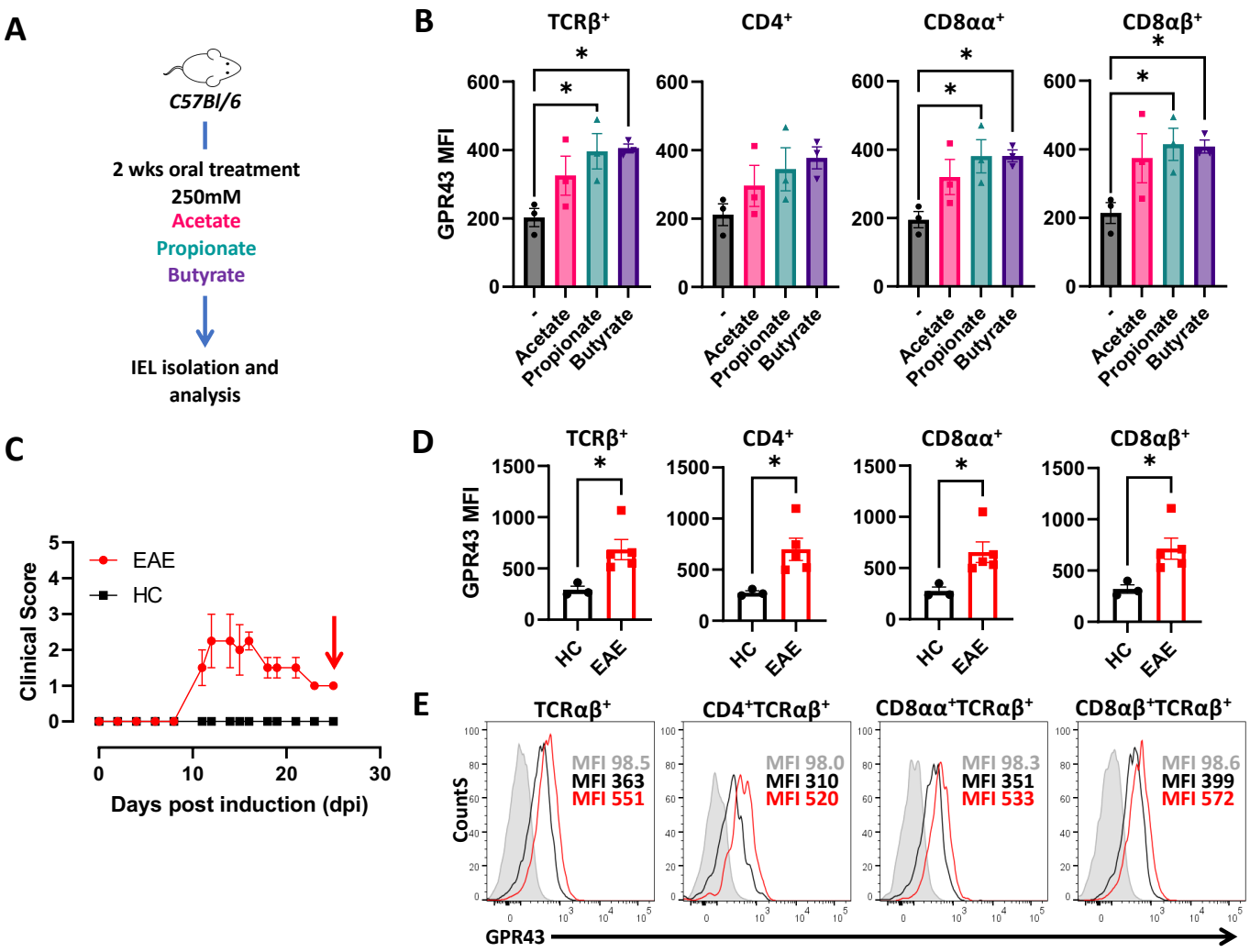
A
C57Bl/6
2 wks oral treatment
250mM
Acetate
Propionate
Butyrate
IEL isolation and
analysis
B
TCRβ+
CD4+
CD8αα+
CD8αβ+
GPR43 MFI
600
400
200
0
-
Acetate
Propionate
Butyrate
C
Clinical Score
EAE
HC
Days post induction (dpi)
D
TCRβ+
CD4+
CD8αα+
CD8αβ+
GPR43 MFI
1500
1000
500
0
HC
EAE
E
TCRαβ+
CD4+TCRαβ+
CD8αα+TCRαβ+
CD8αβ+TCRαβ+
CountS
MFI 98.5
MFI 363
MFI 551
MFI 98.0
MFI 310
MFI 520
MFI 98.3
MFI 351
MFI 533
MFI 98.6
MFI 399
MFI 572
GPR43

Figure S2

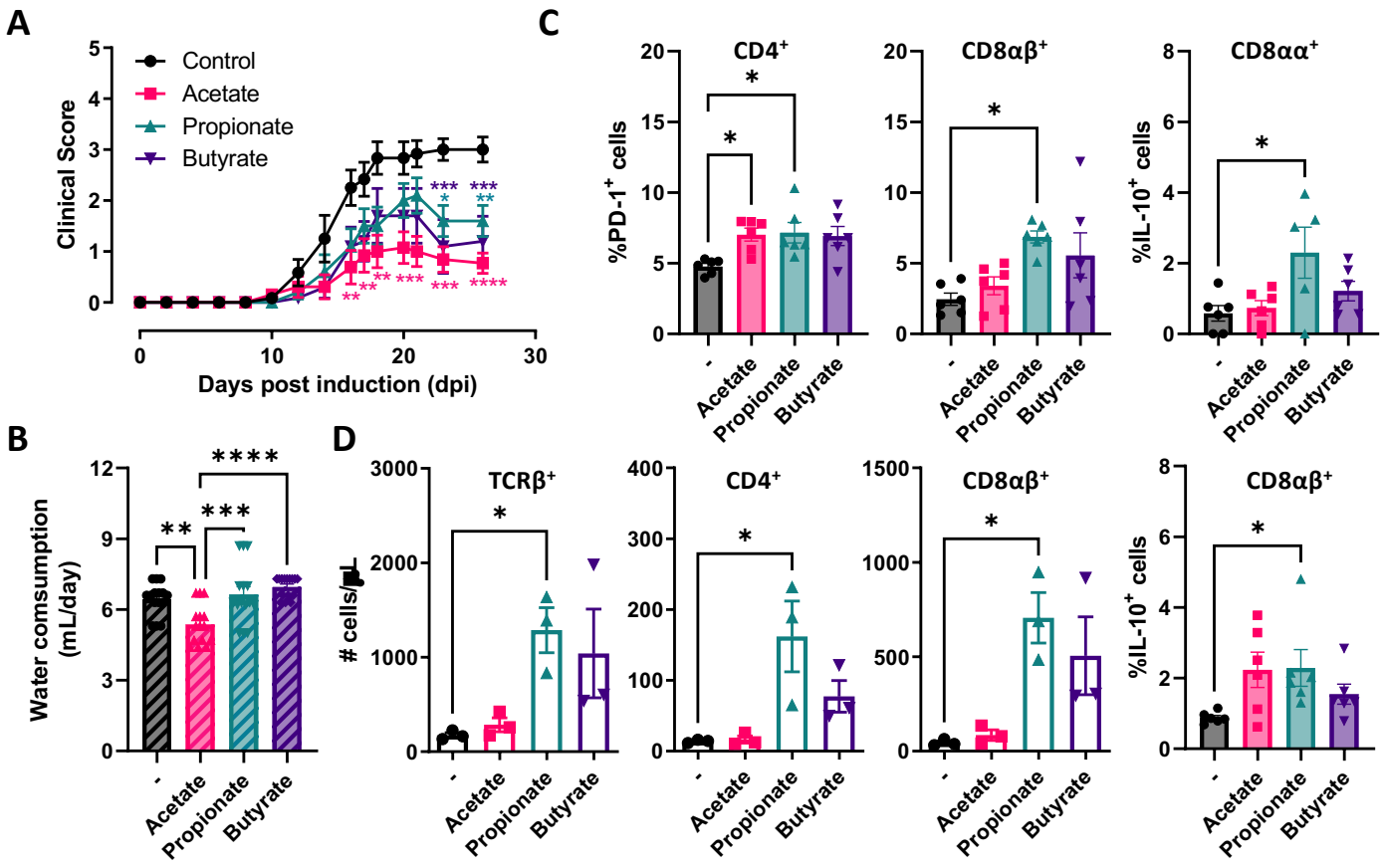
A
Control
Acetate
Propionate
Butyrate
Clinical Score
Days post induction (dpi)
B
Water comsumption (mL/day)
C
CD4+
CD8αβ+
CD8αα+
%PD-1+ cells
%IL-10+ cells
D
TCRβ+
cells/mL
-
Acetate
Propionate
Butyrate

Figure S3

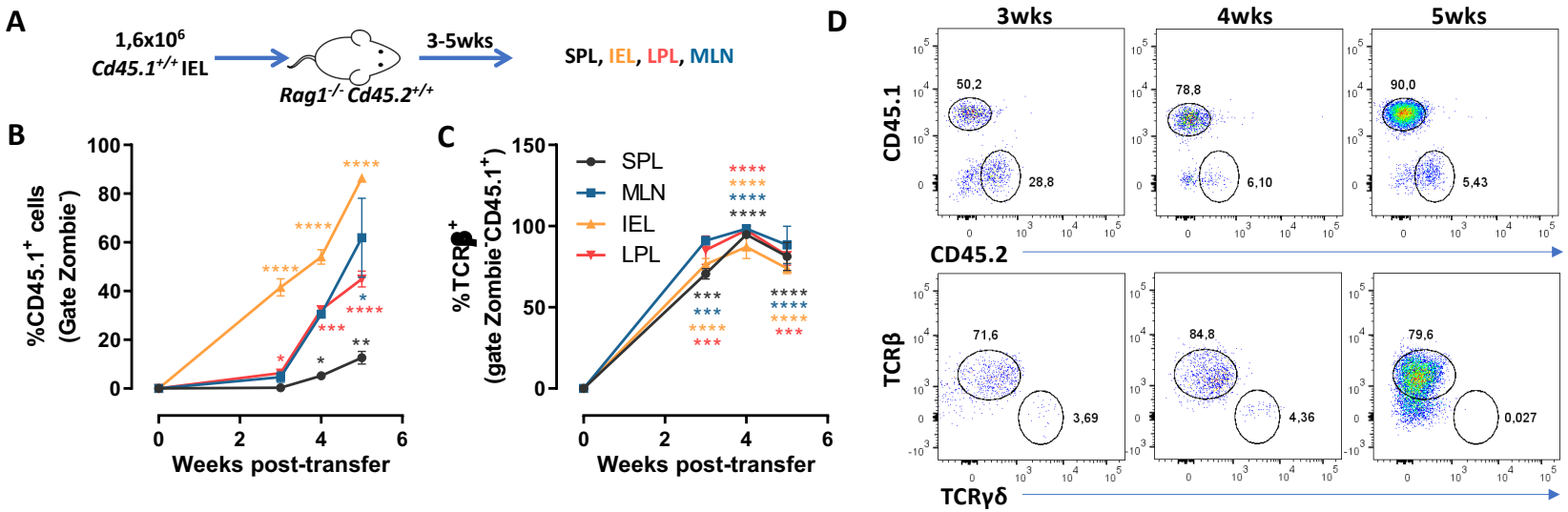
A
1,6x10^6
Cd45.1+/+ IEL
3-5wks
SPL, IEL, LPL, MLN
Rag1-/- Cd45.2+/+
B
%CD45.1+ cells
(Gate Zombie-)
Weeks post-transfer
C
%TCRβ+
(gate Zombie-CD45.1+)
SPL
MLN
IEL
LPL
Weeks post-transfer
D
3wks
4wks
5wks
CD45.1
CD45.2
50,2
28,8
78,8
6,10
90,0
5,43
TCRβ
TCRγδ
71,6
3,69
84,8
4,36
79,6
0,027

Figure S4

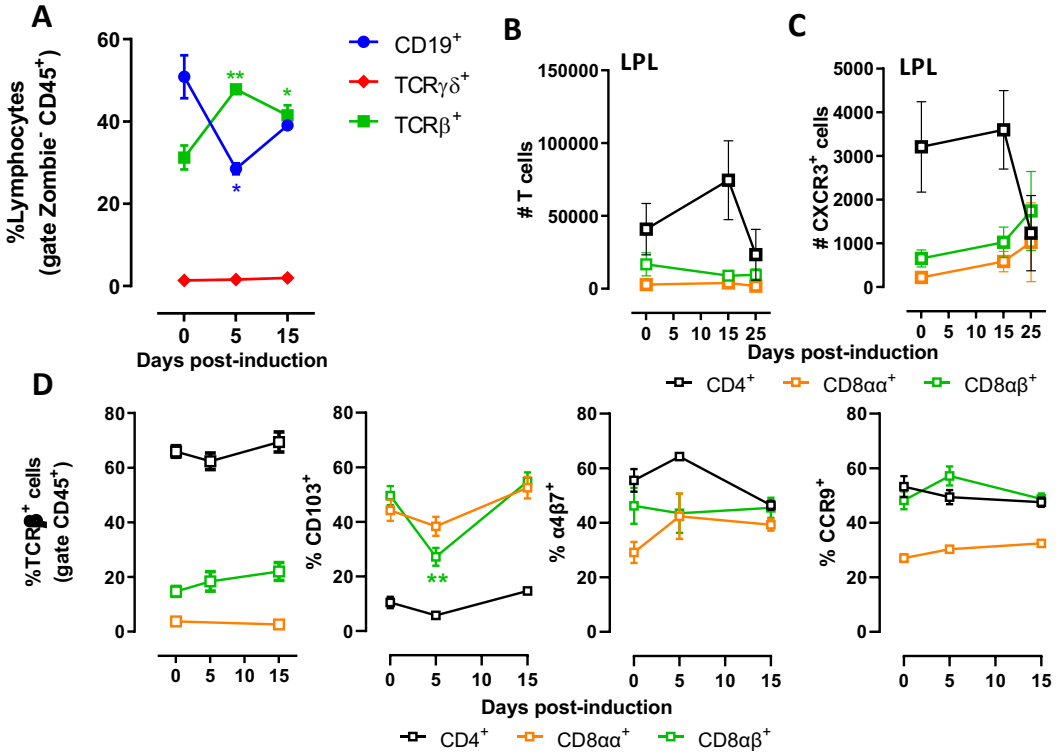
A
%Lymphocytes (gate Zombie⁻ CD45⁺)
CD19⁺
TCRγδ⁺
TCRβ⁺
Days post-induction
B
LPL
T cells
C
LPL
CXCR3⁺ cells
Days post-induction
CD4⁺
CD8αα⁺
CD8αβ⁺
D
%TCRβ⁺ cells (gate CD45⁺)
% CD103⁺
% α4β7⁺
% CCR9⁺
Days post-induction
CD4⁺
CD8αα⁺
CD8αβ⁺

Figure S5