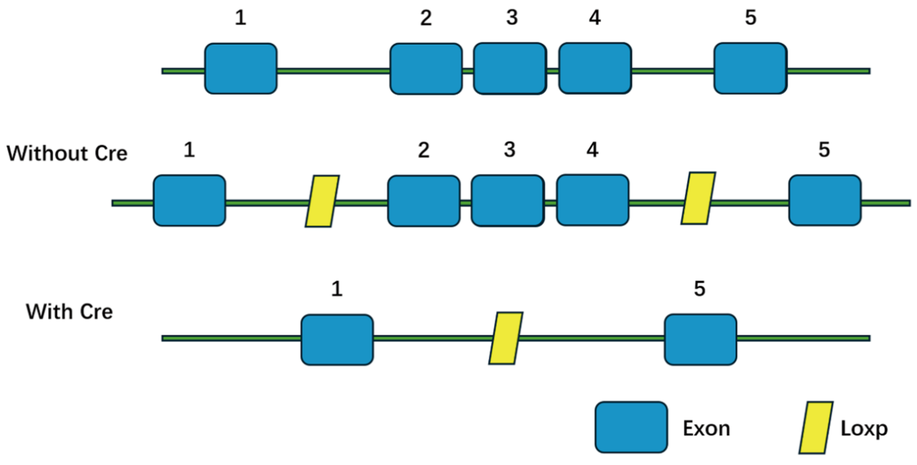
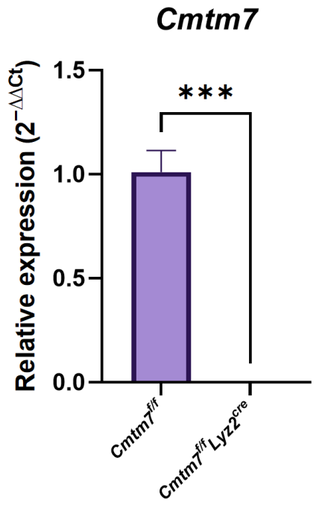
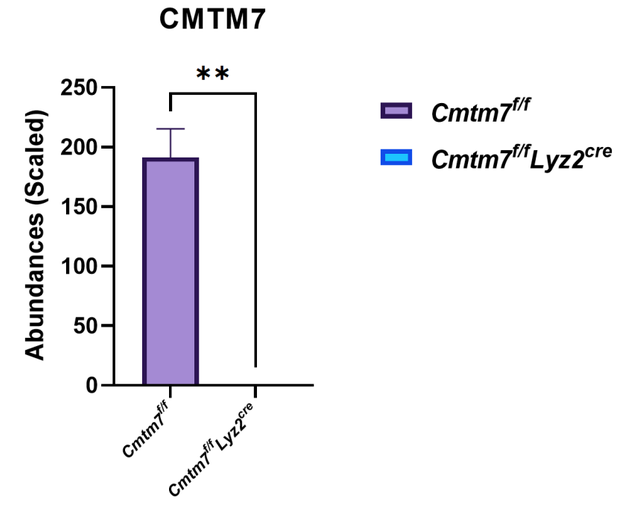
A


1
2
3
4
5
Without Cre
1
2
3
4
5
With Cre
1
5
Exon
Loxp

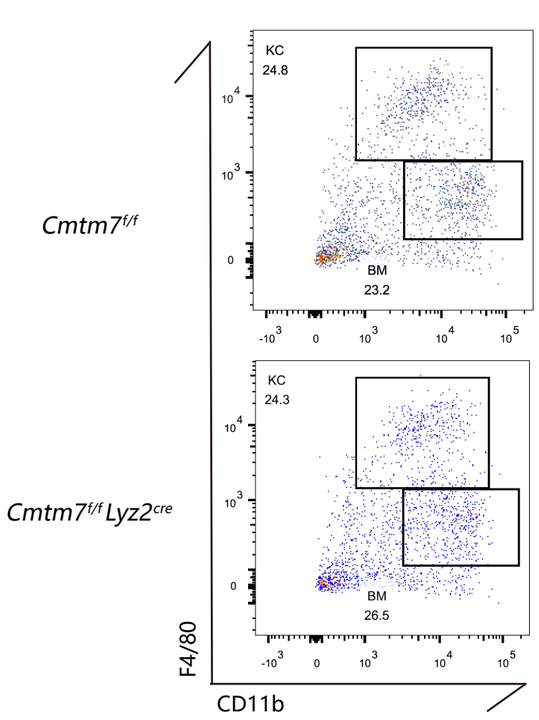
B

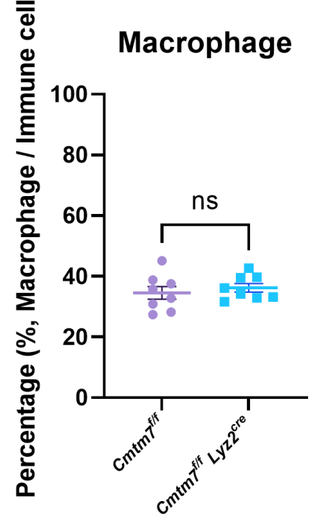

Cmtm7
Relative expression (2^-ΔΔCt)
1.5
1.0
0.5
0.0
***
Cmtm7f/f
Cmtm7f/fLyz2cre

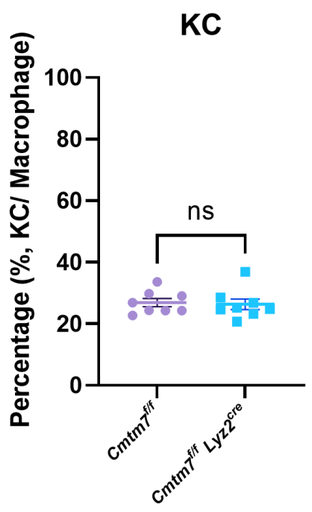
C

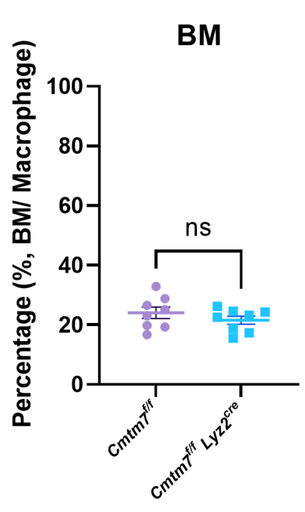

CMTM7
Abundances (Scaled)
250
200
150
100
50
0
**
Cmtm7f/f
Cmtm7f/fLyz2cre

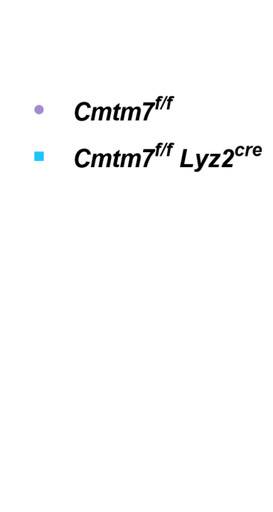
D


Cmtm7f/f
Cmtm7f/f Lyz2cre
KC
24.8
BM
23.2
KC
24.3
BM
26.5
F4/80
CD11b

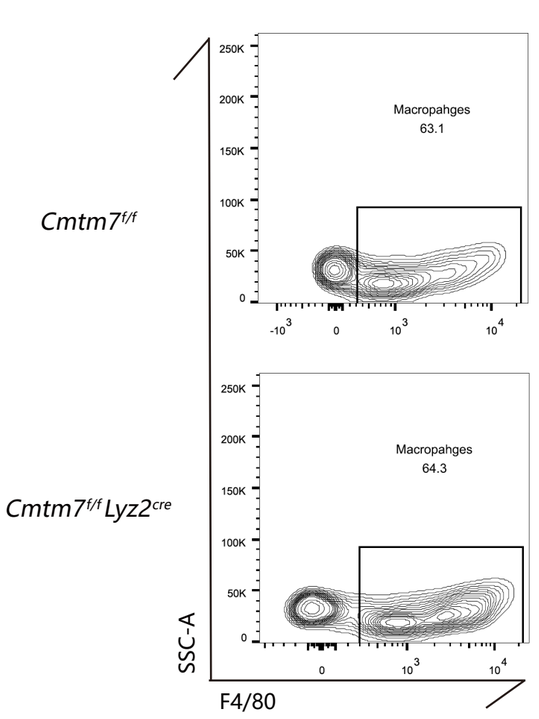

Macrophage
Percentage (%, Macrophage / Immune cell)
100
80
60
40
20
0
ns
Cmtm7f/f
Cmtm7f/f Lyz2cre

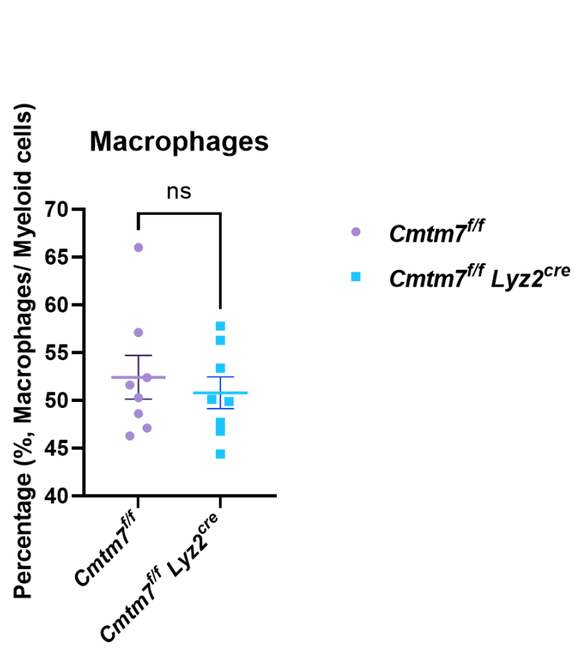

KC
Percentage (%, KC/ Macrophage)
100
80
60
40
20
0
ns
Cmtm7f/f
Cmtm7f/f Lyz2cre


BM
Percentage (%, BM/ Macrophage)
100
80
60
40
20
0
ns
Cmtm7f/f
Cmtm7f/f Lyz2cre

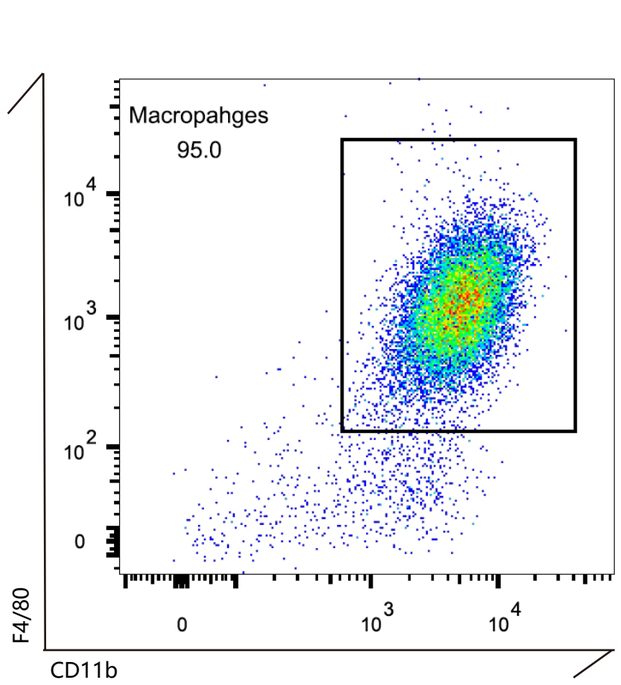

Cmtm7f/f
Cmtm7f/f Lyz2cre

E

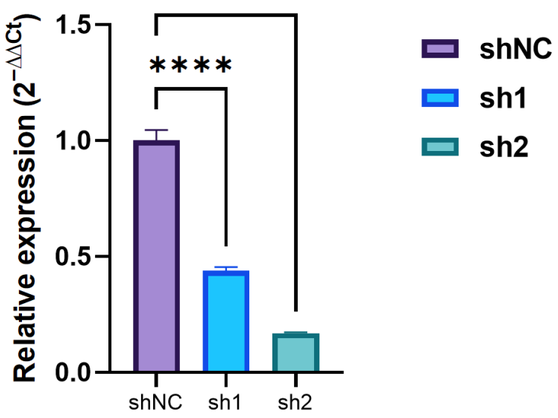

Cmtm7f/f
Cmtm7f/f Lyz2cre
Macropahges
63.1
Macropahges
64.3
SSC-A
F4/80


Macrophages
Percentage (%, Macrophages/ Myeloid cells)
70
65
60
55
50
45
40
ns
Cmtm7f/f
Cmtm7f/f Lyz2cre

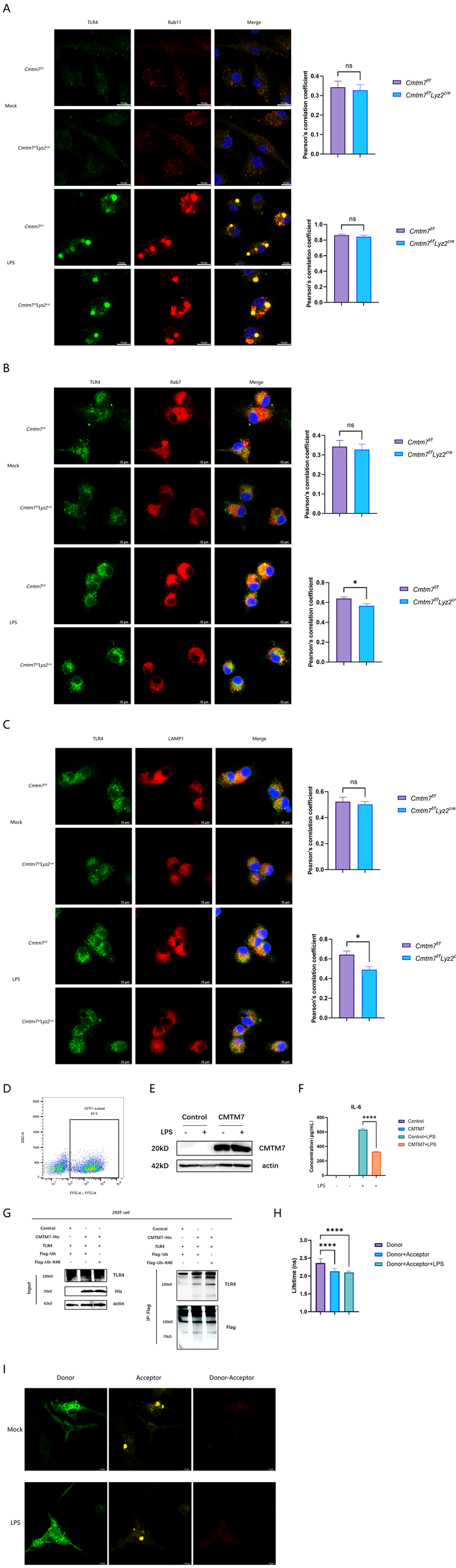
F


Macropahges
95.0
F4/80
CD11b

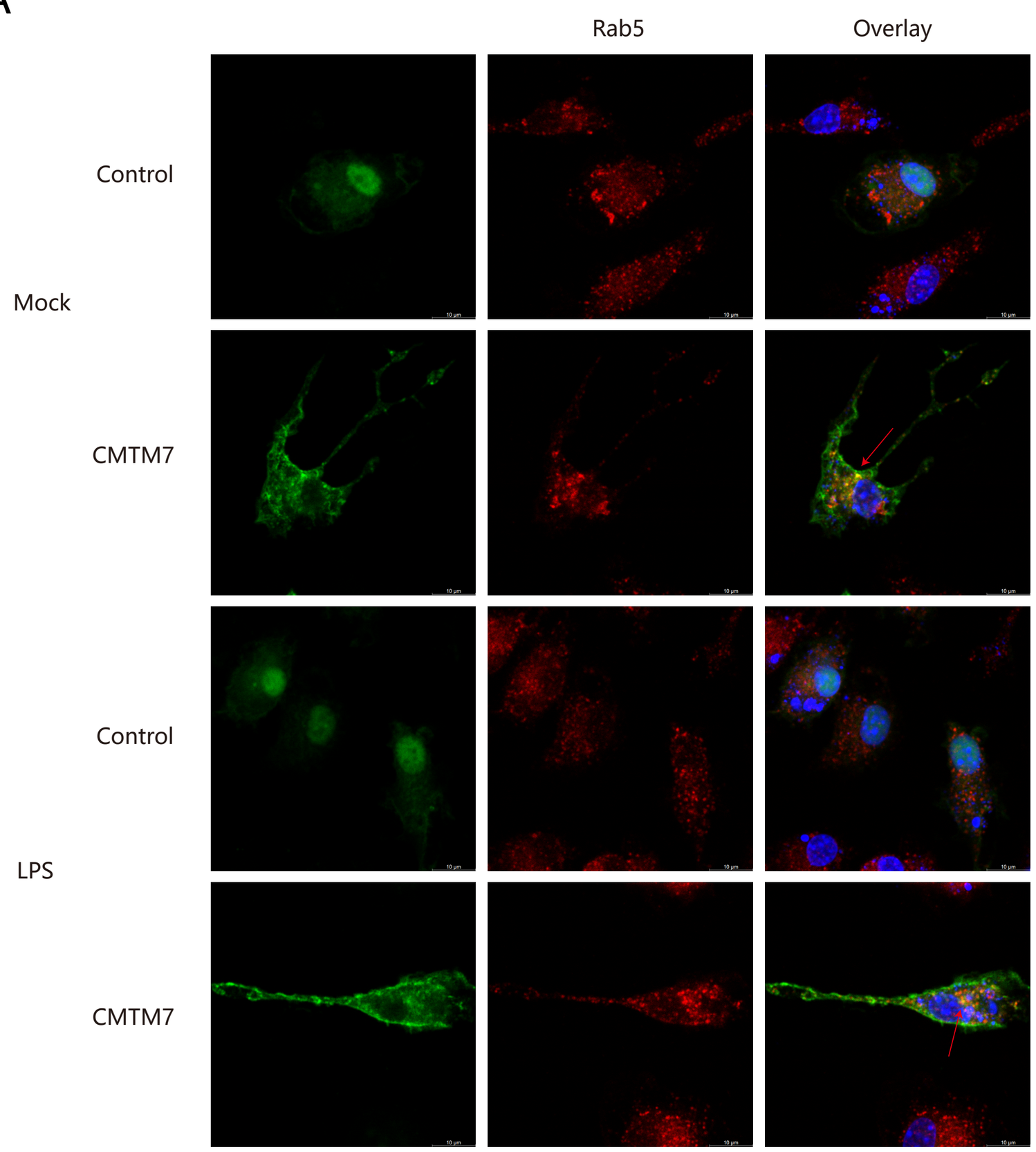
G

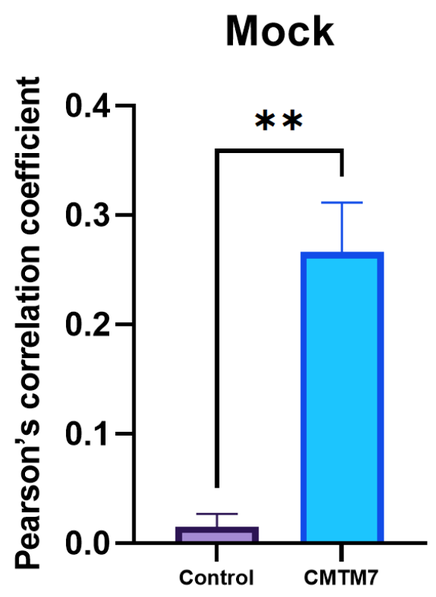

Cmtm7
Relative expression (2^-ΔΔCt)
1.5
1.0
0.5
0.0
****
****
shNC
sh1
sh2

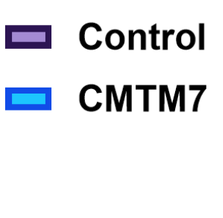
shNC
sh1
sh2

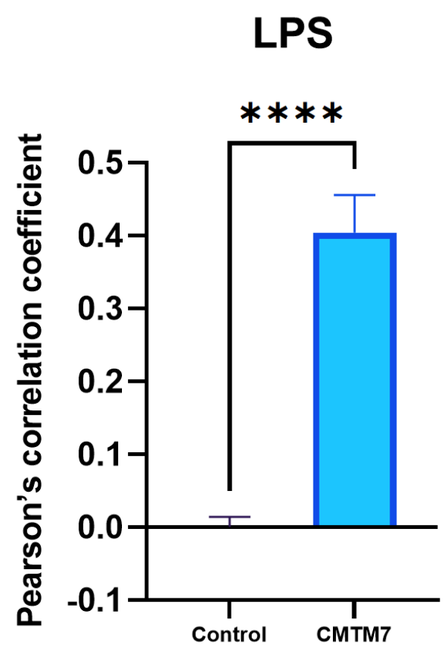

A
TLR4
Rab11
Merge
Cmtm7f/f
Mock
Cmtm7f/fLyz2cre
Cmtm7f/f
LPS
Cmtm7f/fLyz2cre
Pearson's correlation coefficient
ns
Cmtm7f/f
Cmtm7f/fLyz2cre
B
TLR4
Rab7
Merge
Cmtm7f/f
Mock
Cmtm7f/fLyz2cre
Cmtm7f/f
LPS
Cmtm7f/fLyz2cre
Pearson's correlation coefficient
ns
*
Cmtm7f/f
Cmtm7f/fLyz2cre
C
TLR4
LAMP1
Merge
Cmtm7f/f
Mock
Cmtm7f/fLyz2cre
Cmtm7f/f
LPS
Cmtm7f/fLyz2cre
Pearson's correlation coefficient
ns
*
Cmtm7f/f
Cmtm7f/fLyz2cre
D
GFP+ subset
54.5
SSC-A
FITC-A :: FITC-A
E
Control
CMTM7
LPS
20kD
42kD
CMTM7
actin
F
IL-6
Concentration (pg/mL)
LPS
****
Control
CMTM7
Control+LPS
CMTM7+LPS
G
293T cell
Control
CMTM7-His
TLR4
Flag-Ub
Flag-Ub-K48
Input
100kD
20kD
42kD
TLR4
His
actin
IP: Flag
100kD
70kD
TLR4
Flag
H
Lifetime (ns)
****
****
Donor
Donor+Acceptor
Donor+Acceptor+LPS
I
Donor
Acceptor
Donor-Acceptor
Mock
LPS

A


Rab5
Overlay
Control
Mock
CMTM7
LPS
Control
CMTM7
10 μm

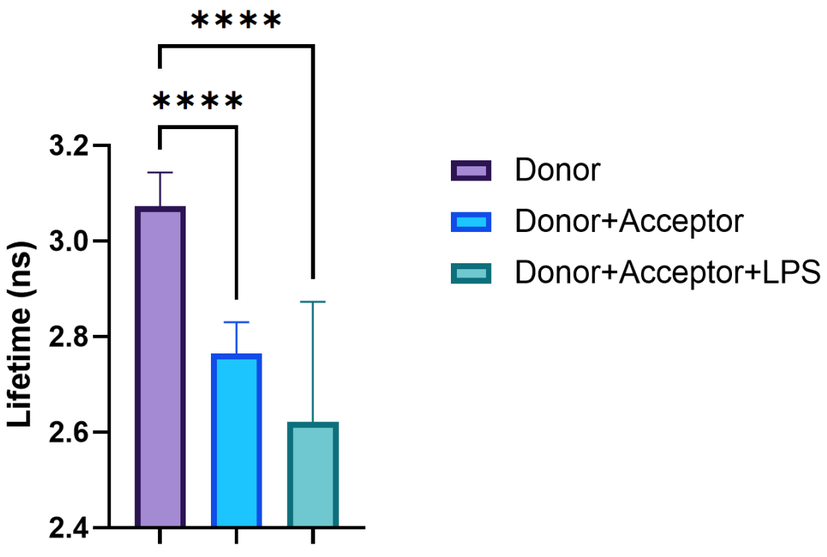

Mock
Pearson's correlation coefficient
0.4
0.3
0.2
0.1
0.0
**
Control
CMTM7


Control
CMTM7

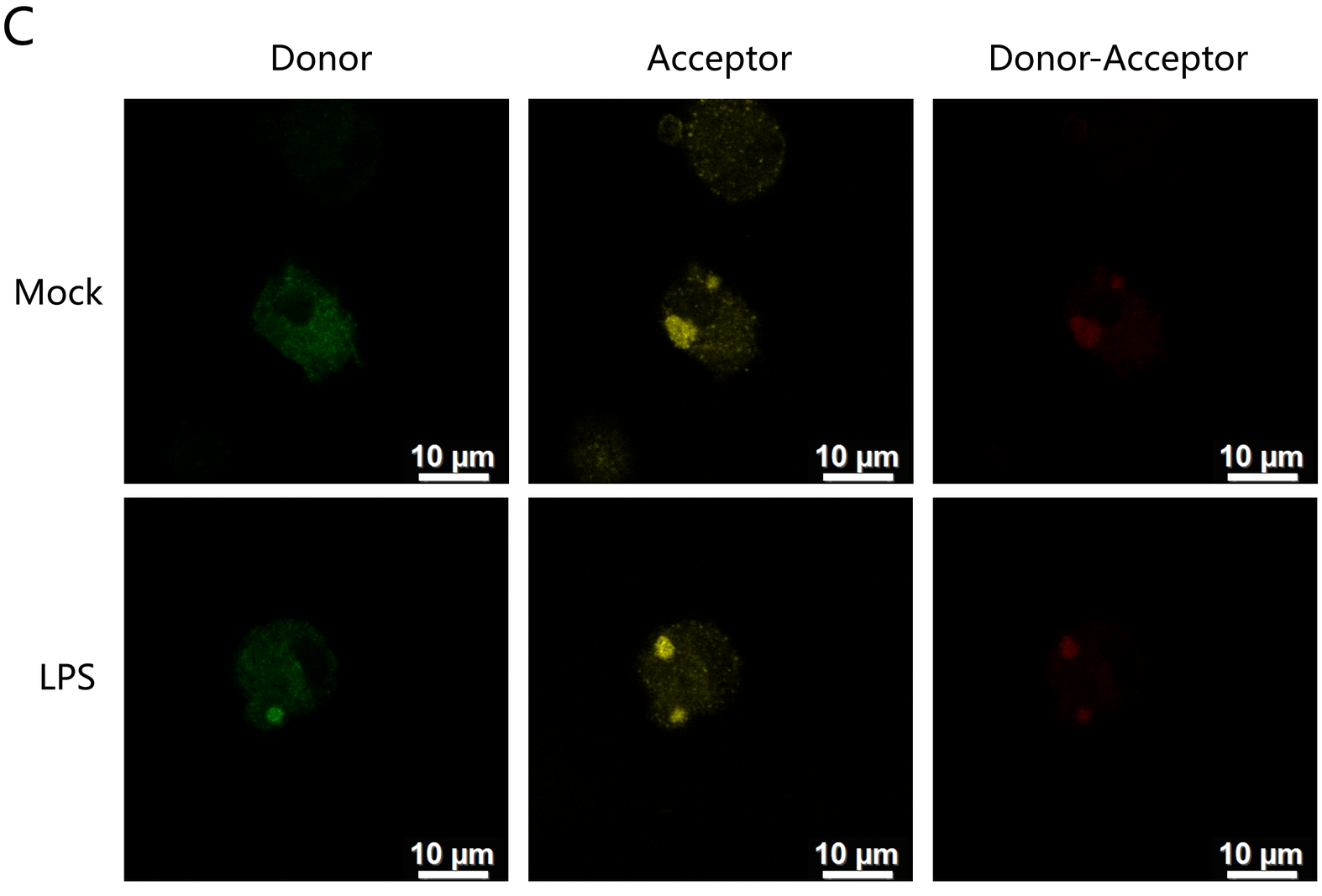

LPS
Pearson's correlation coefficient
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
****
Control
CMTM7

Control
CMTM7

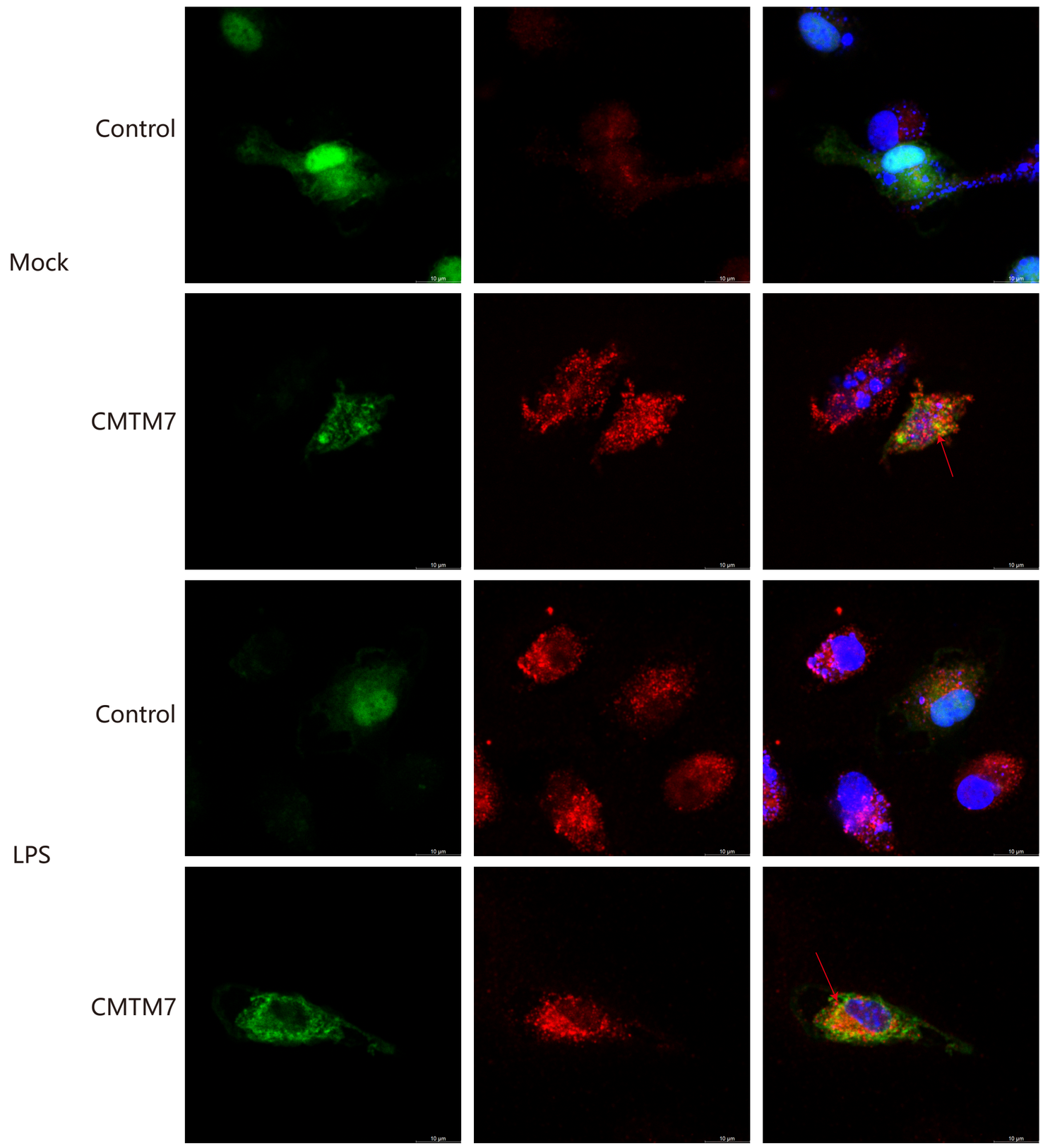
B

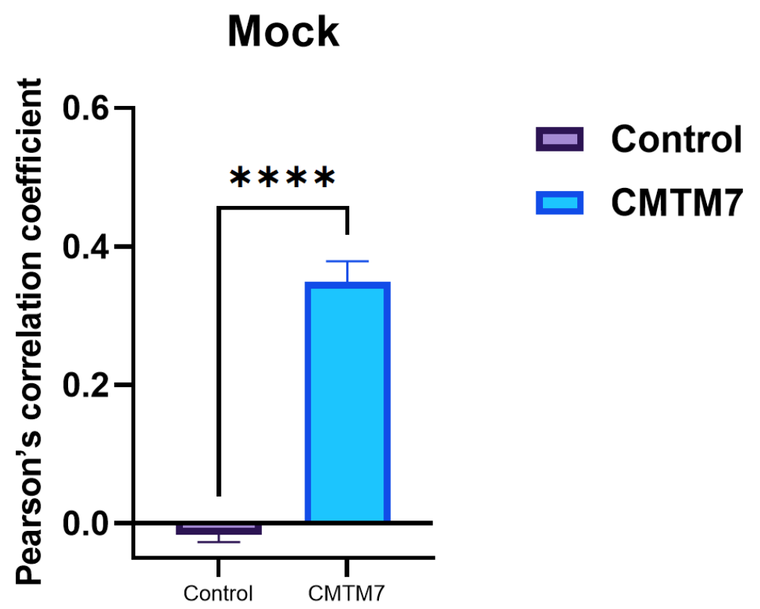

****
****
3.2
3.0
2.8
2.6
2.4
Lifetime (ns)
Donor
Donor+Acceptor
Donor+Acceptor+LPS

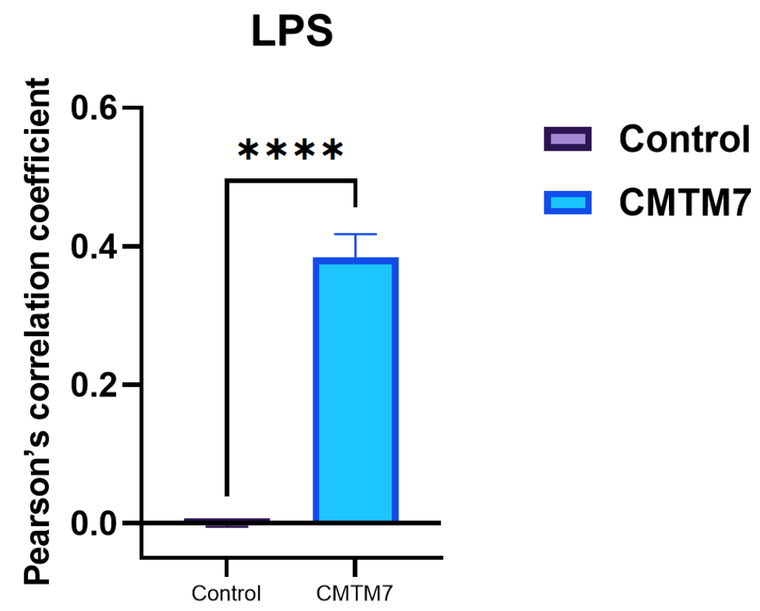
C


Donor
Acceptor
Donor-Acceptor
Mock
LPS
10 μm

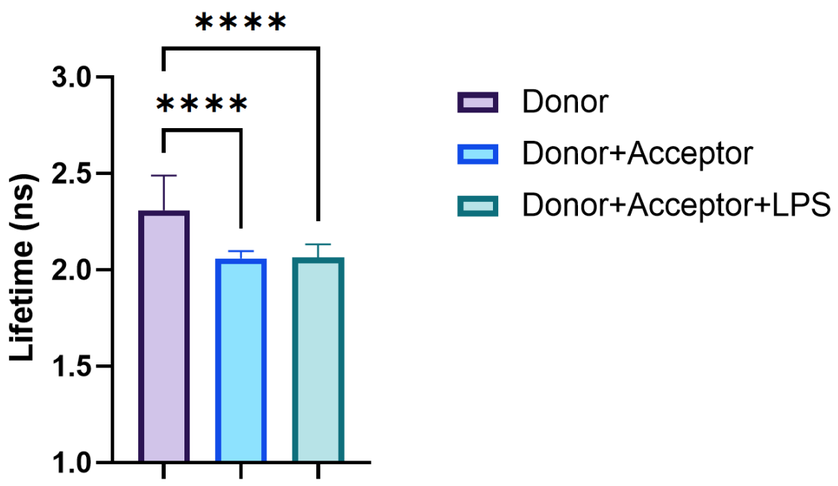
A


Gapex5
Overlay
Control
Mock
CMTM7
LPS
Control
CMTM7
10 μm

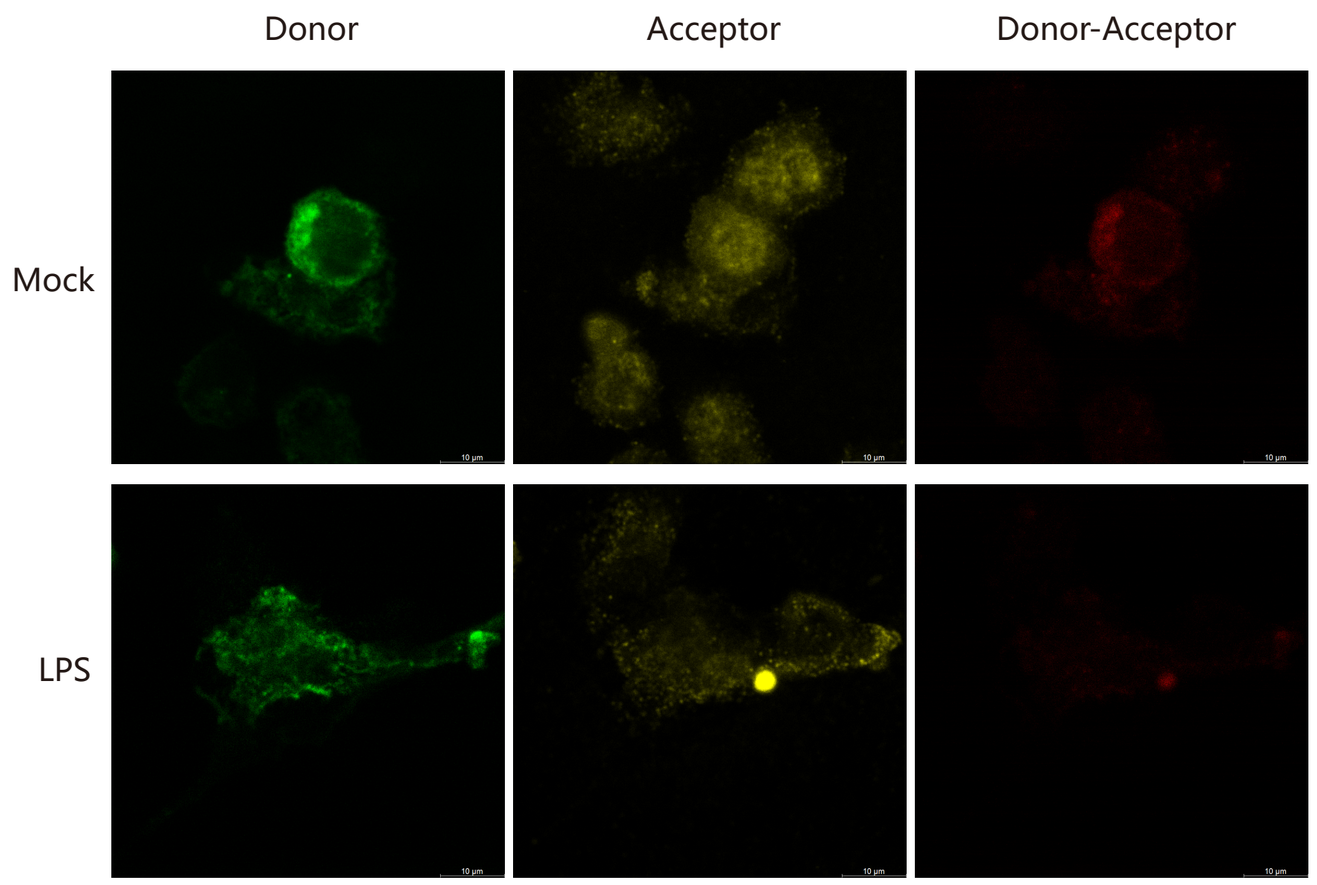

Mock
Pearson's correlation coefficient
0.6
0.4
0.2
0.0
****
Control
CMTM7
Control
CMTM7


LPS
Pearson's correlation coefficient
0.6
0.4
0.2
0.0
****
Control
CMTM7
Control
CMTM7

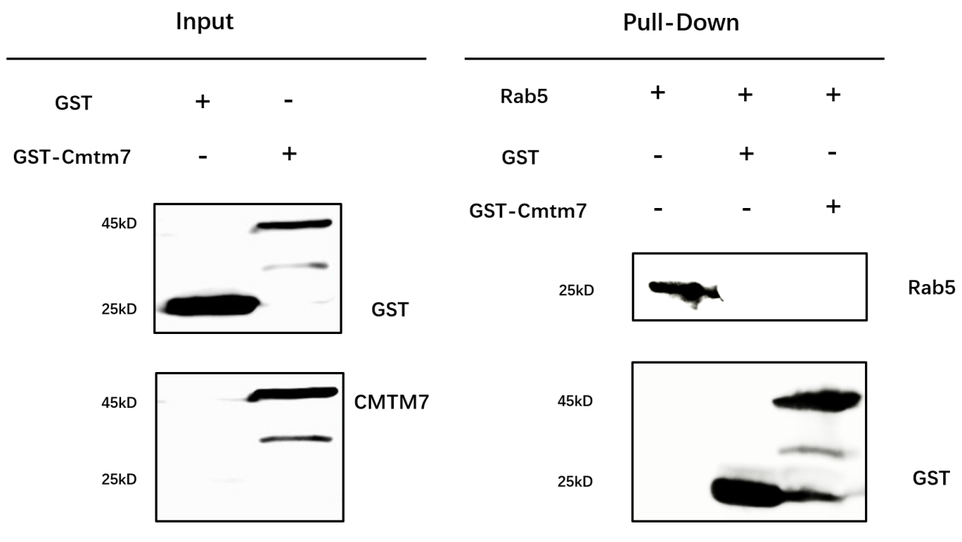
B


Lifetime (ns)
3.0
2.5
2.0
1.5
1.0
****
****
Donor
Donor+Acceptor
Donor+Acceptor+LPS

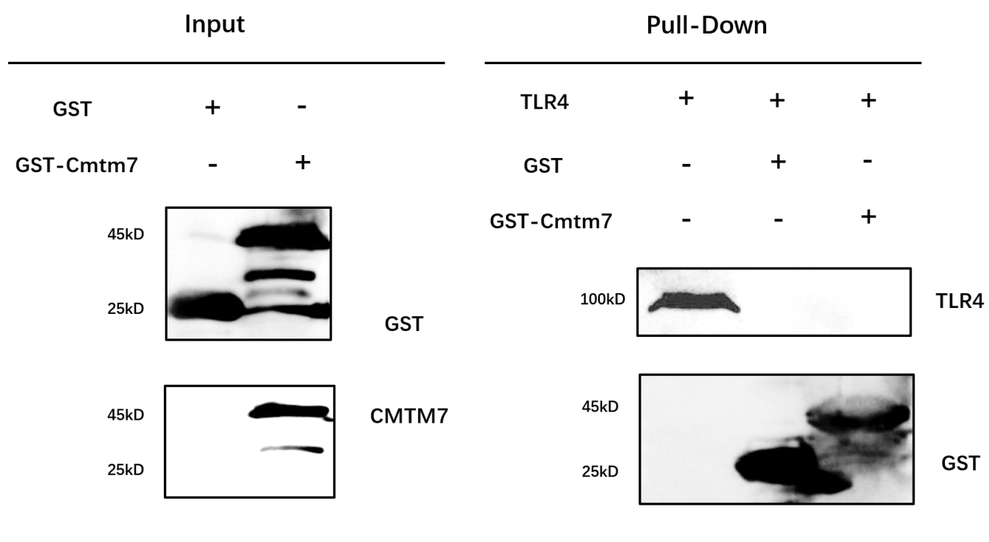
C


Donor
Acceptor
Donor-Acceptor
Mock
LPS
10 μm

D


Input
GST + -
GST-Cmtm7 - +
45kD
25kD
GST
CMTM7
Pull-Down
Rab5 + + +
GST - + -
GST-Cmtm7 - - +
25kD
Rab5
45kD
25kD
GST

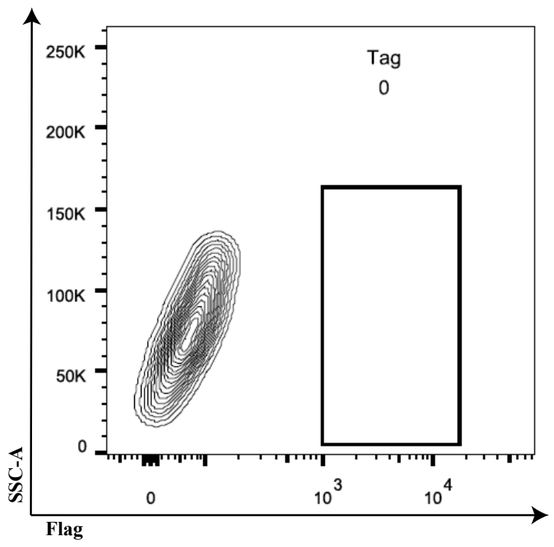
E

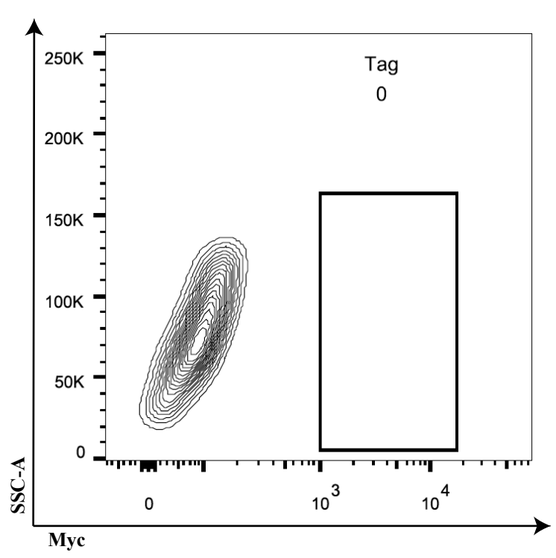

Input
GST + -
GST-Cmtm7 - +
45kD
25kD
GST
45kD
25kD
CMTM7
Pull-Down
TLR4 + + +
GST - + -
GST-Cmtm7 - - +
100kD
TLR4
45kD
25kD
GST

A

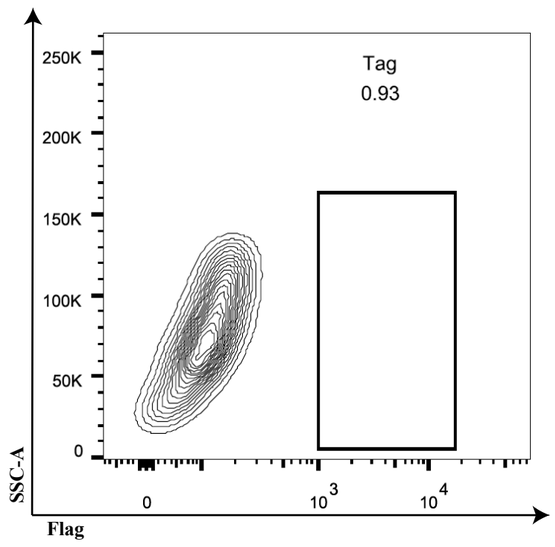
Non-Permeabilization

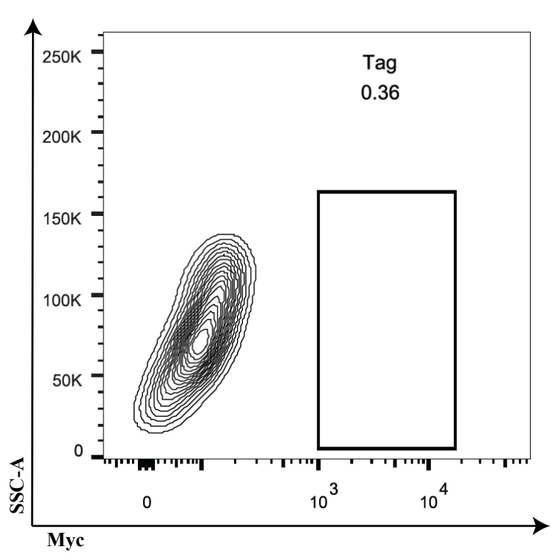
isotype





anti-Flag / anti-Myc

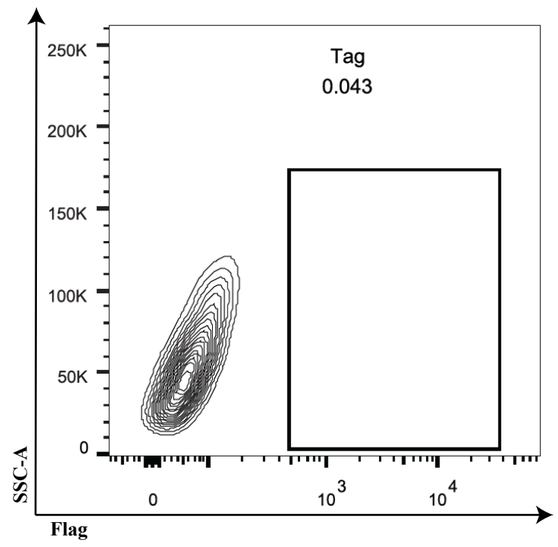


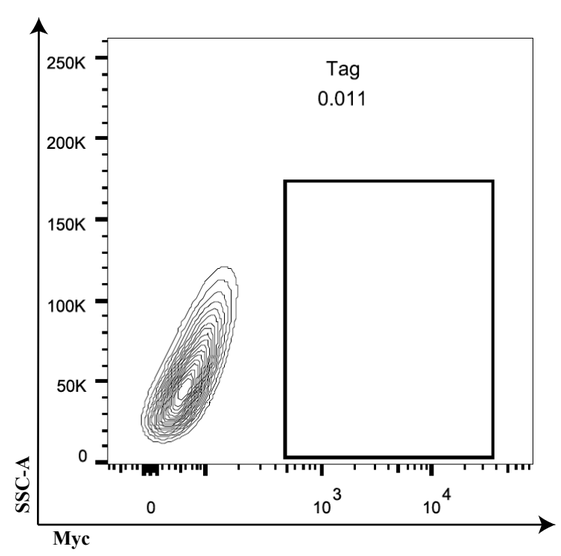


B

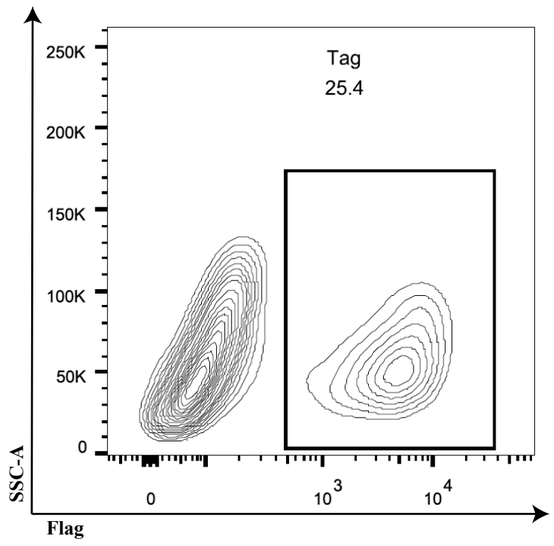
Permeabilization

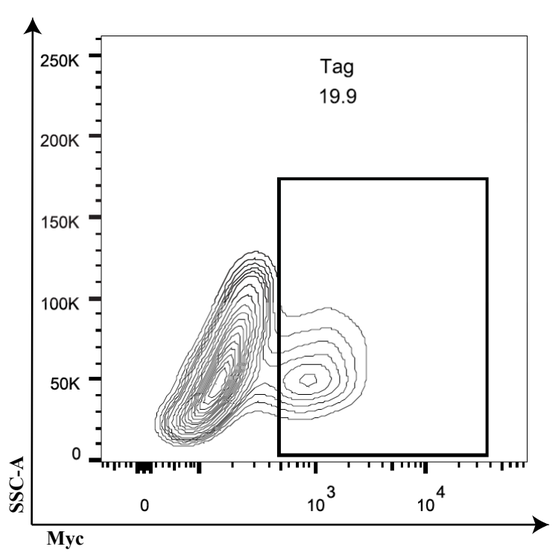
isotype





anti-Flag / anti-Myc

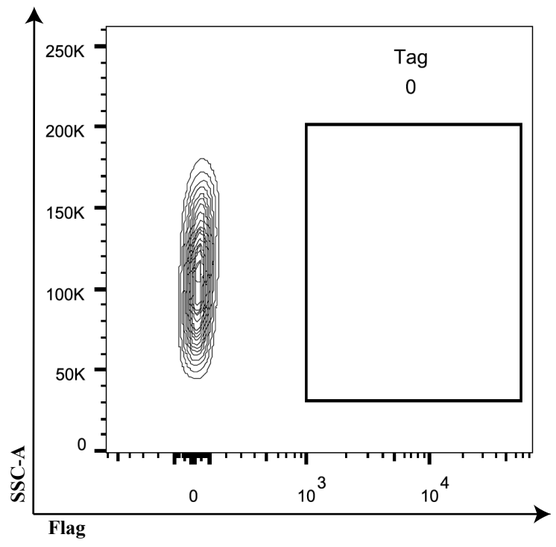


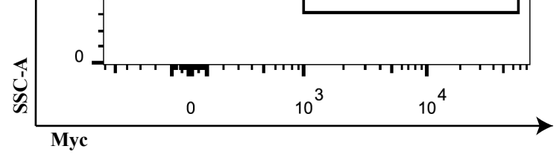


C

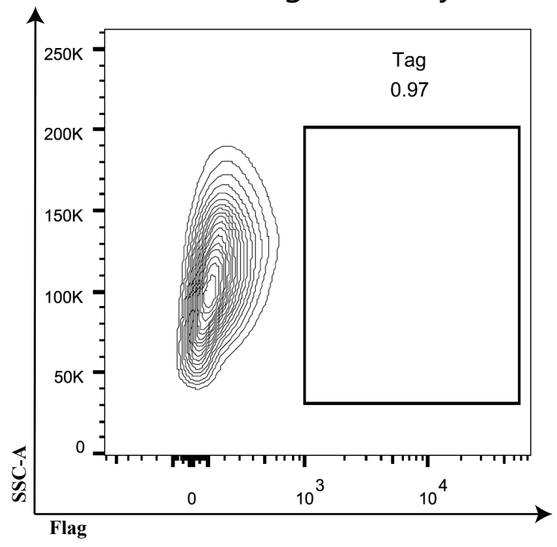
Non-Permeabilization

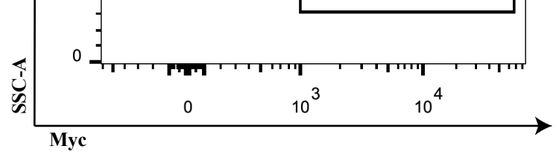
isotype





anti-Flag / anti-Myc

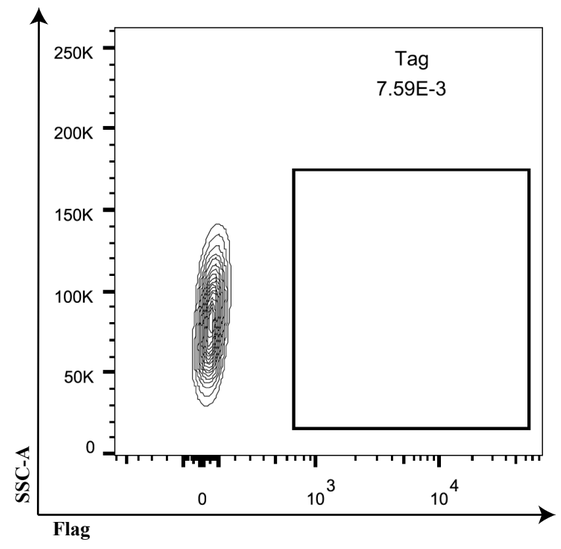


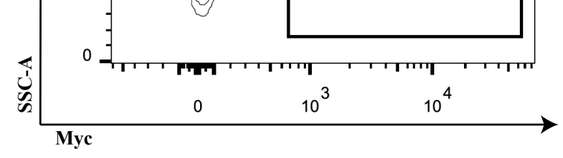


D

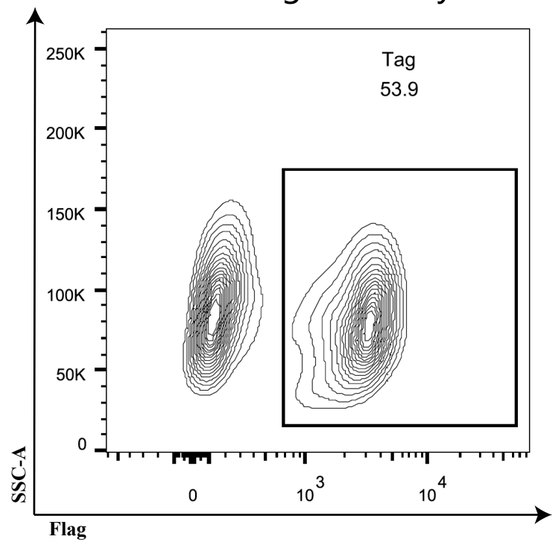
Permeabilization

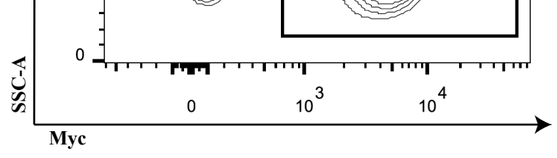
isotype



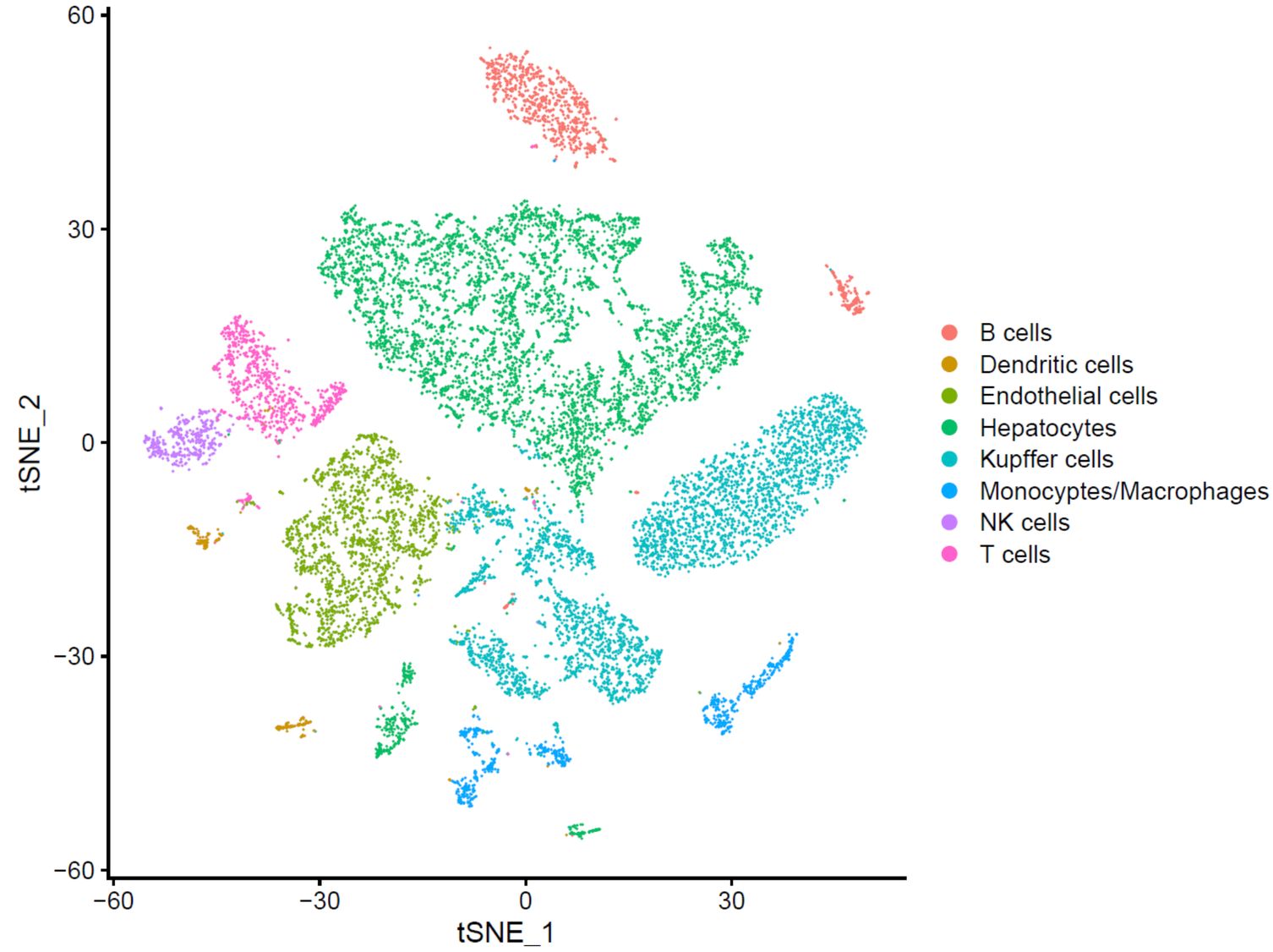


anti-Flag / anti-Myc

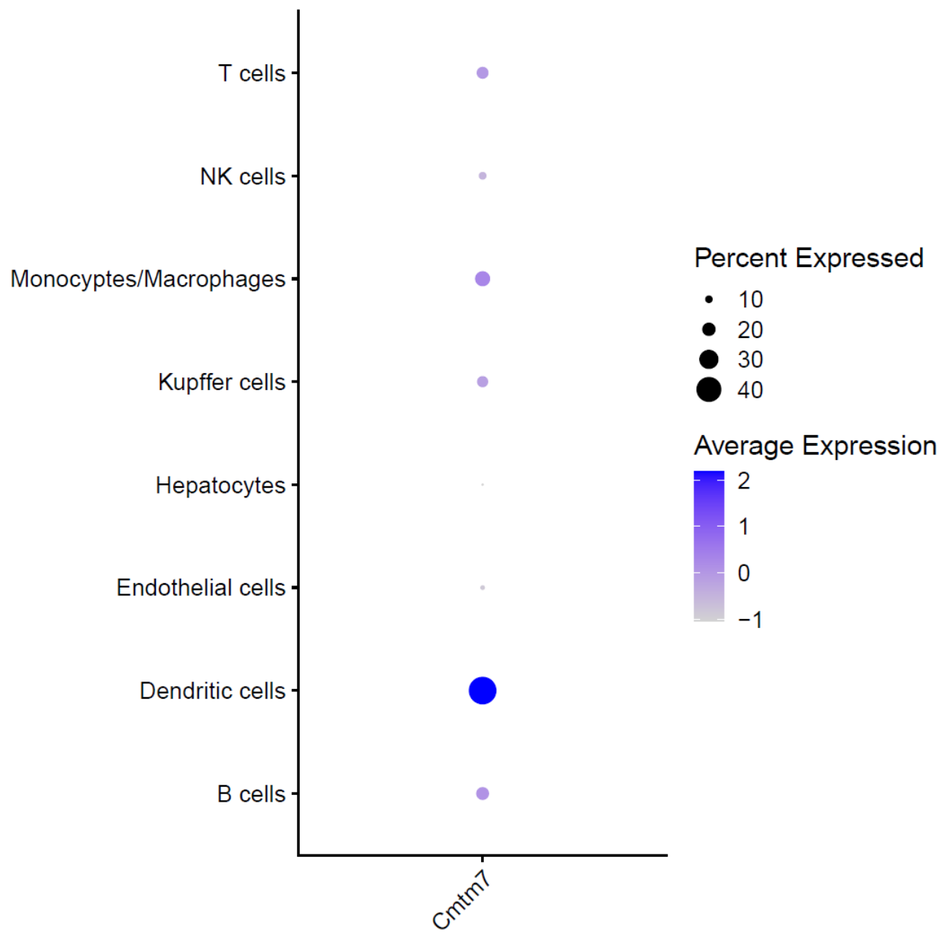




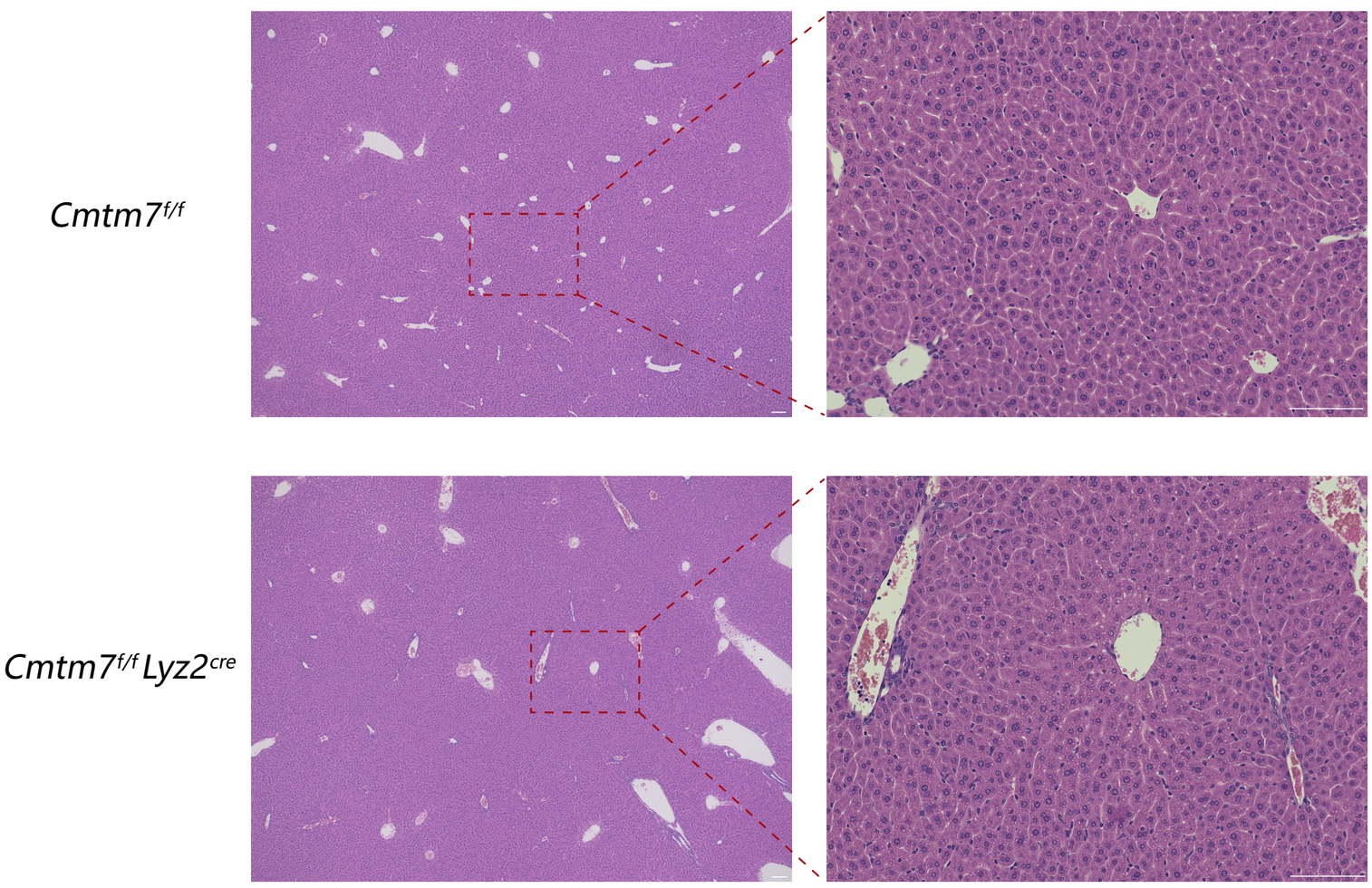
A


60
30
0
−30
−60
tSNE_2
−60
−30
0
30
tSNE_1
B cells
Dendritic cells
Endothelial cells
Hepatocytes
Kupffer cells
Monocytes/Macrophages
NK cells
T cells

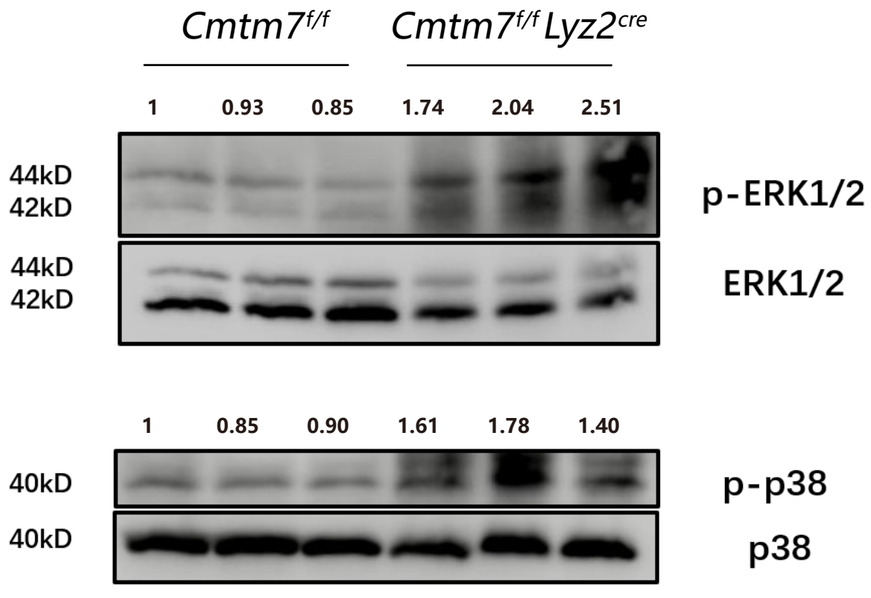
B


T cells
NK cells
Monocytes/Macrophages
Kupffer cells
Hepatocytes
Endothelial cells
Dendritic cells
B cells
Cmtm7
Percent Expressed
10
20
30
40
Average Expression
2
1
0
−1

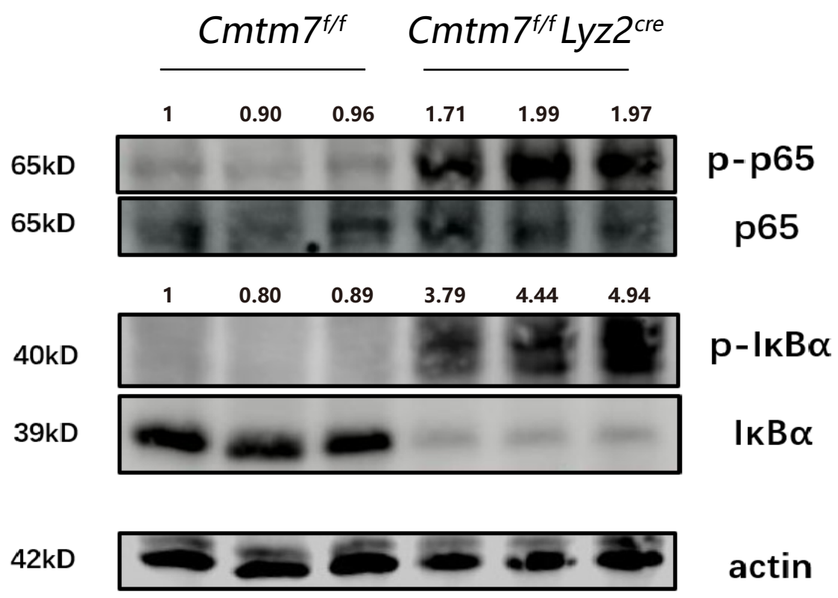
C


Cmtm7f/f
Cmtm7f/f Lyz2cre

D


Cmtm7f/f
Cmtm7f/f Lyz2cre
1
0.93
0.85
1.74
2.04
2.51
44kD
42kD
p-ERK1/2
ERK1/2
1
0.85
0.90
1.61
1.78
1.40
40kD
p-p38
p38

E


Cmtm7f/f
Cmtm7f/f Lyz2cre
1
0.90
0.96
1.71
1.99
1.97
65kD
p-p65
p65
1
0.80
0.89
3.79
4.44
4.94
40kD
p-IκBα
39kD
IκBα
42kD
actin