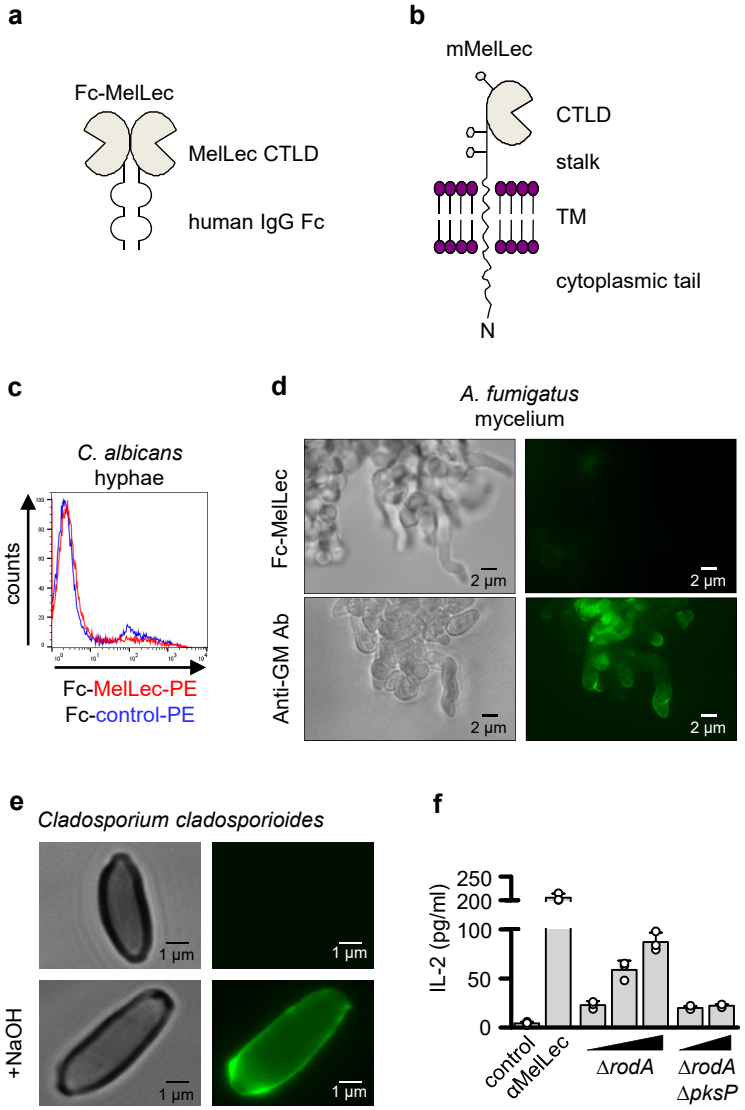
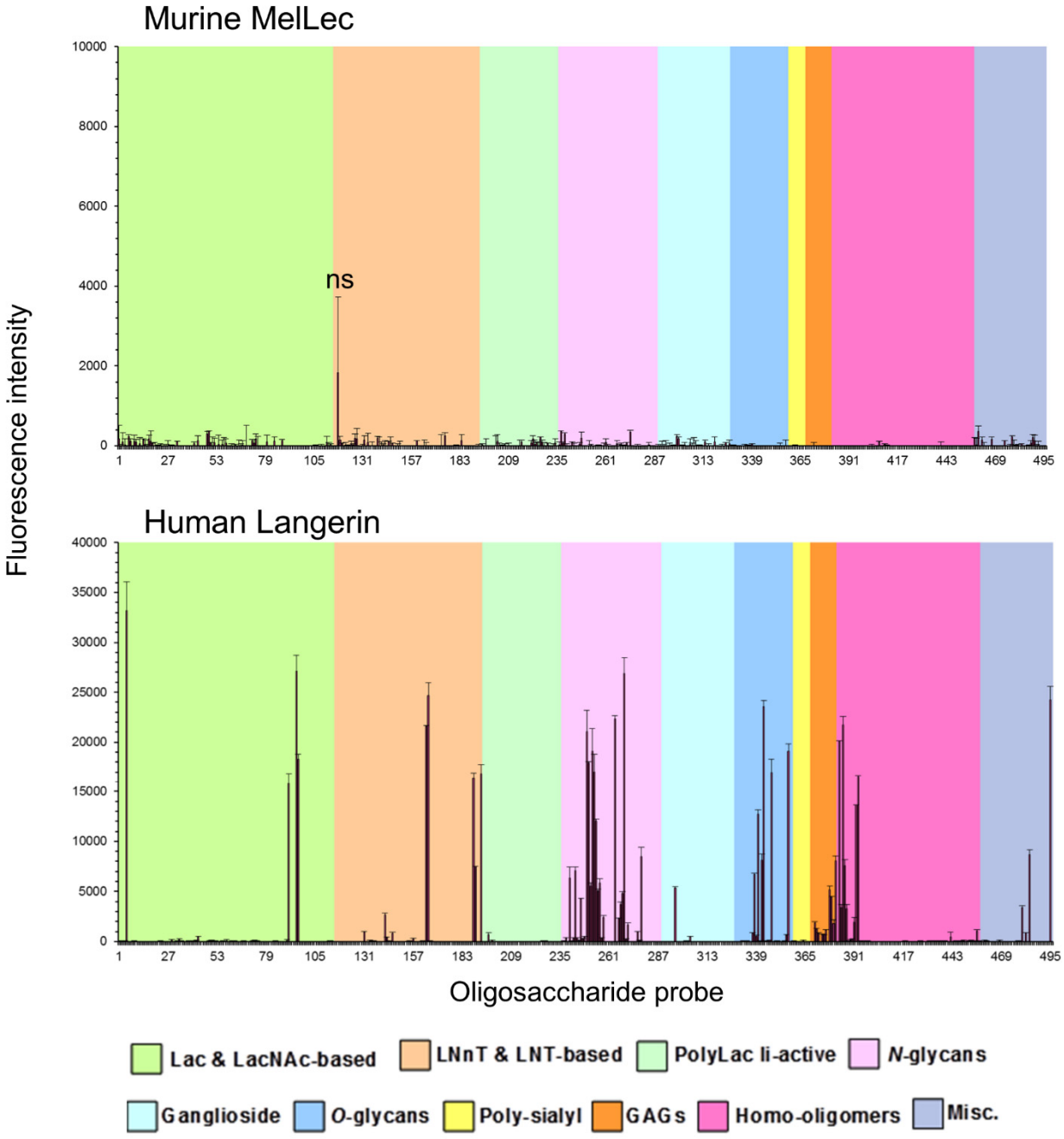
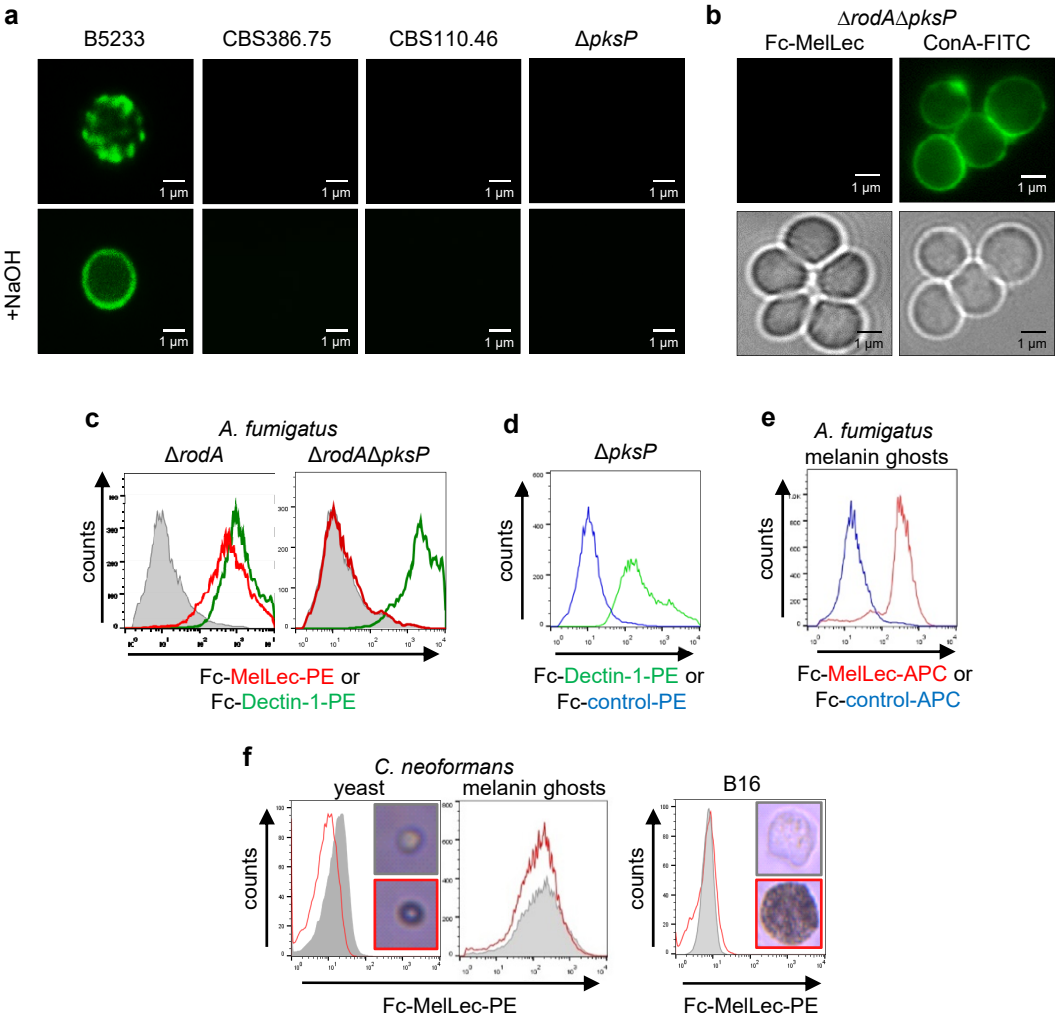


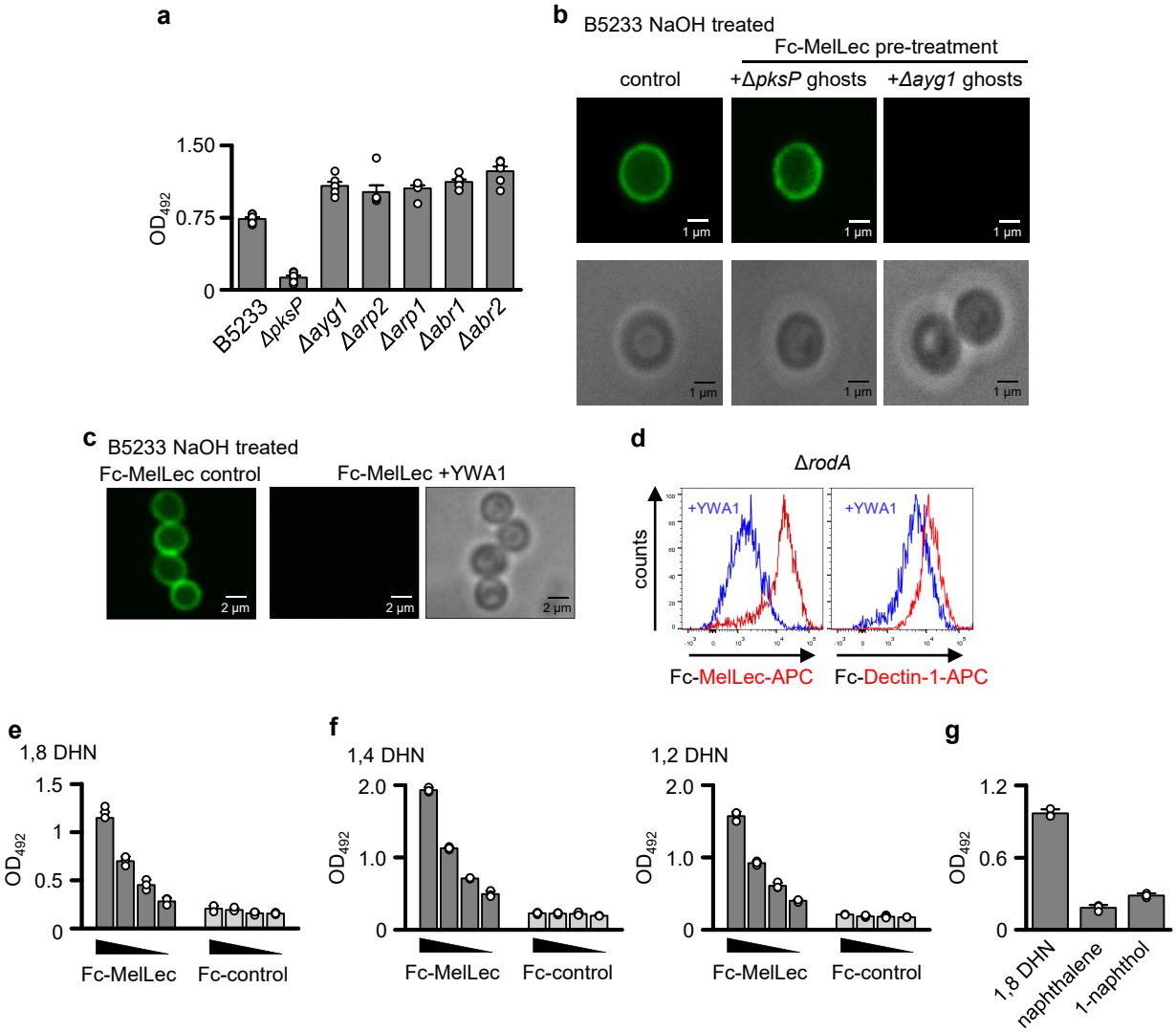
Stappers et al Extended Data Figure 1



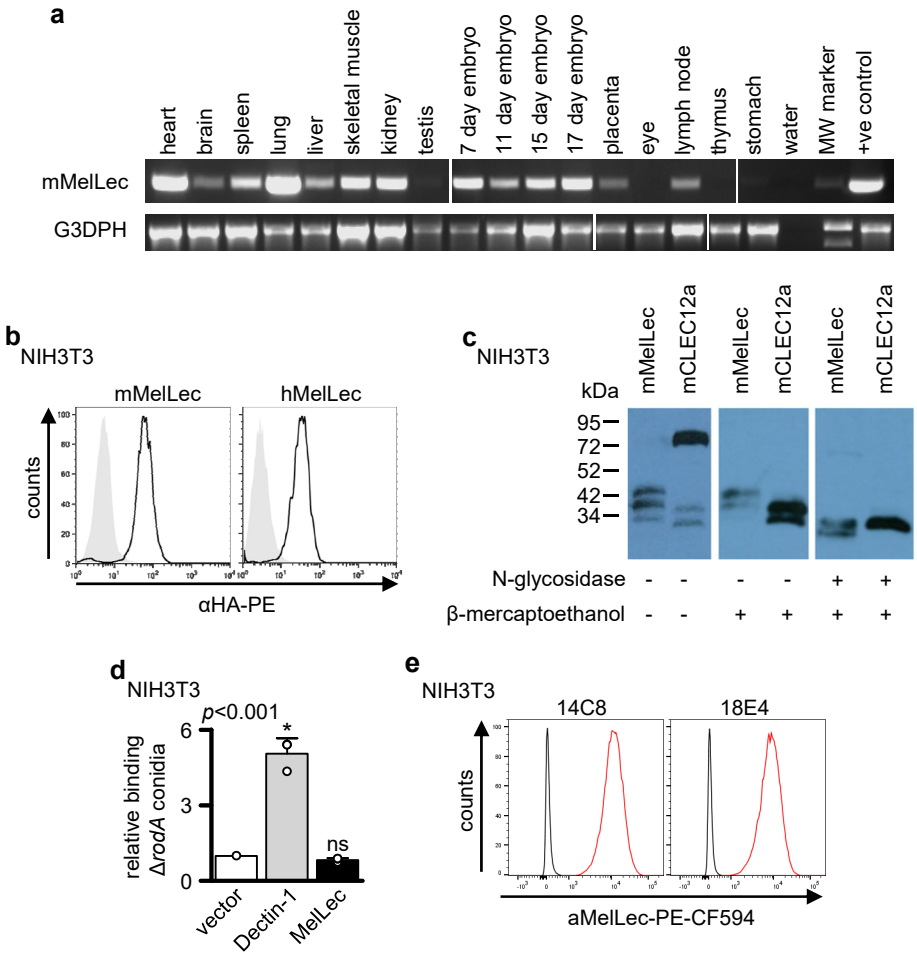
Stappers et al Extended Data Figure 2

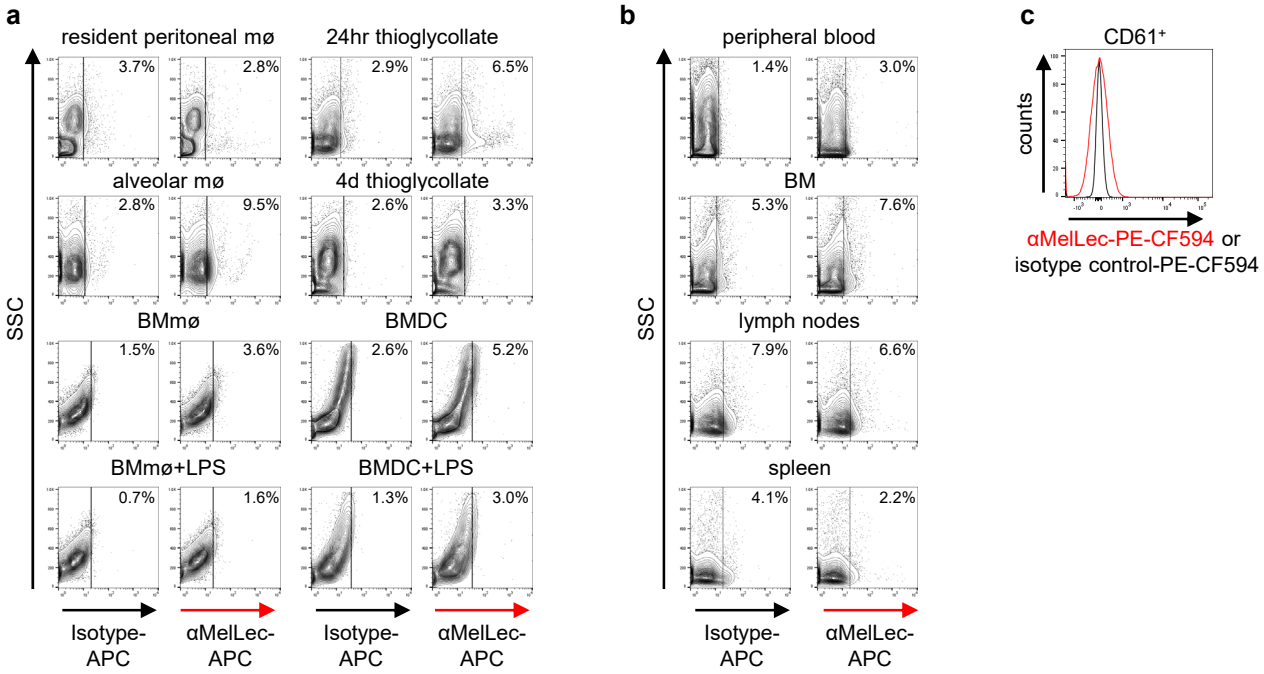


Stappers et al Extended Data Figure 3

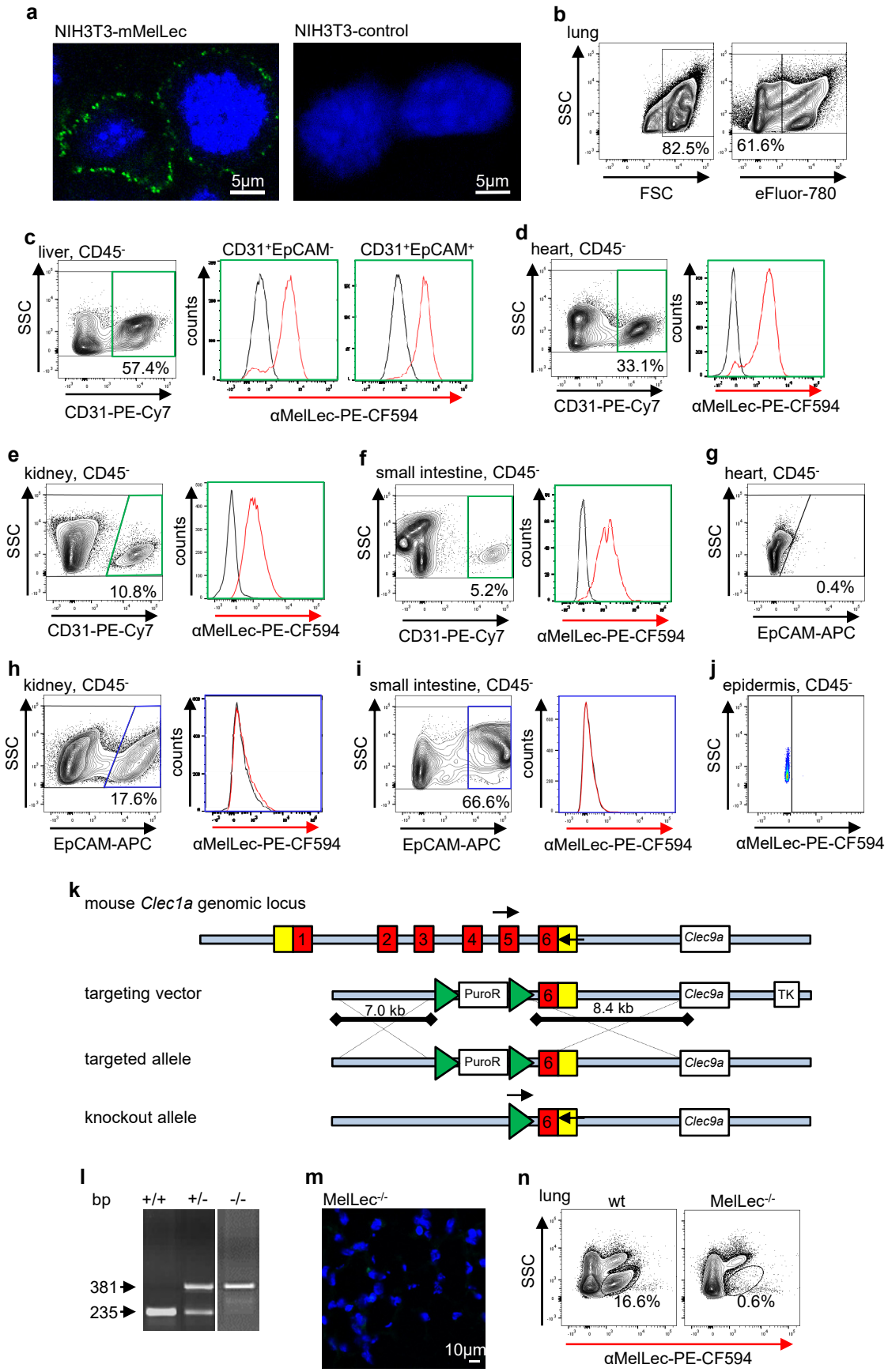


Stappers et al Extended Data Figure 4

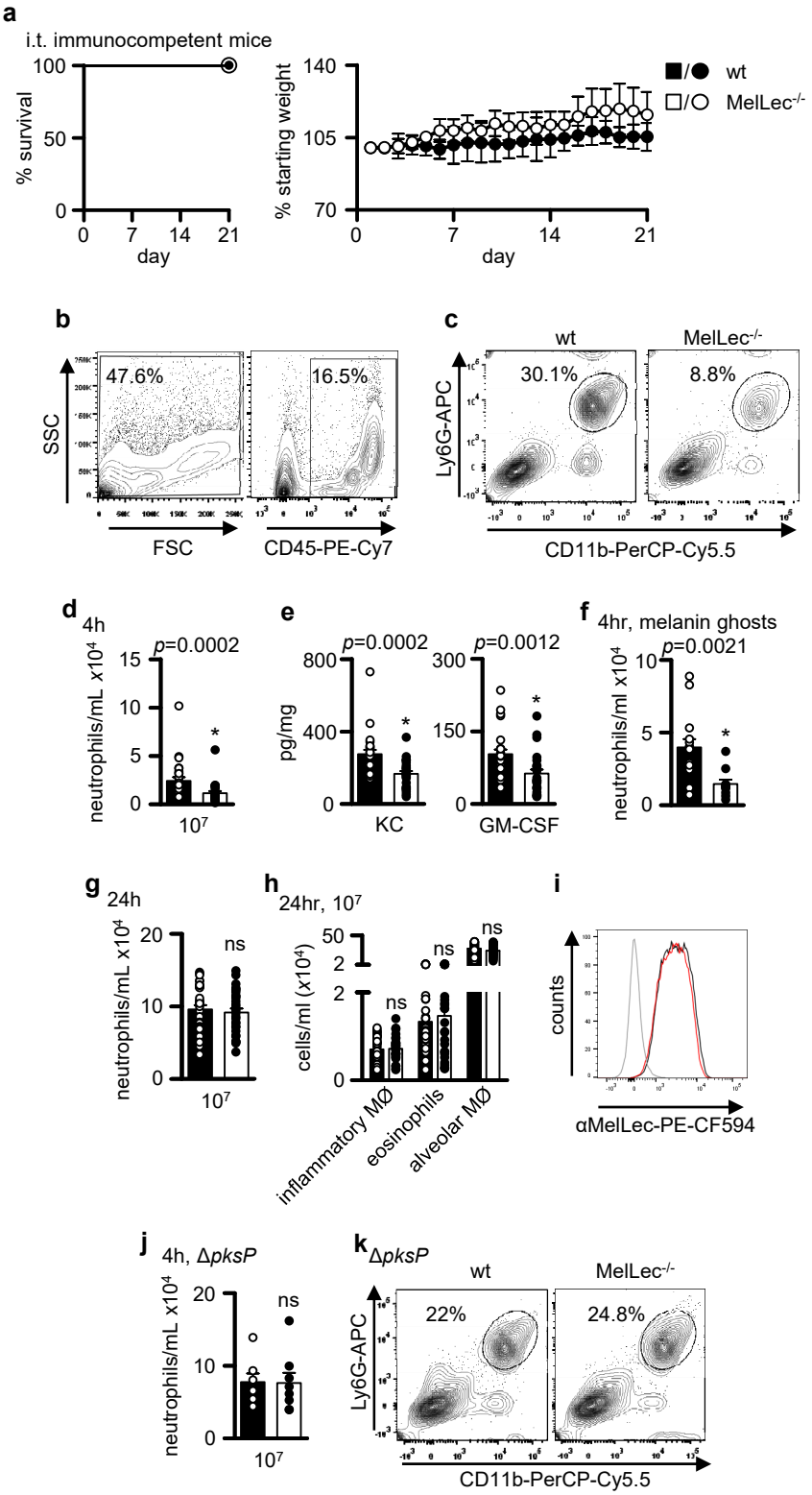

a
heart
brain
spleen
lung
liver
skeletal muscle
kidney
testis
7 day embryo
11 day embryo
15 day embryo
17 day embryo
placenta
eye
lymph node
thymus
stomach
water
MW marker
+ve control
mMelLec
G3DPH
b
NIH3T3
mMelLec
hMelLec
counts
αHA-PE
c
NIH3T3
mMelLec
mCLEC12a
mMelLec
mCLEC12a
mMelLec
mCLEC12a
kDa
95
72
52
42
34
N-glycosidase - - - - + +
β-mercaptoethanol - - + + + +
d
NIH3T3
p<0.001
relative binding
ΔrodA conidia
6
3
0
*
ns
vector
Dectin-1
MelLec
e
NIH3T3
14C8
18E4
counts
aMelLec-PE-CF594

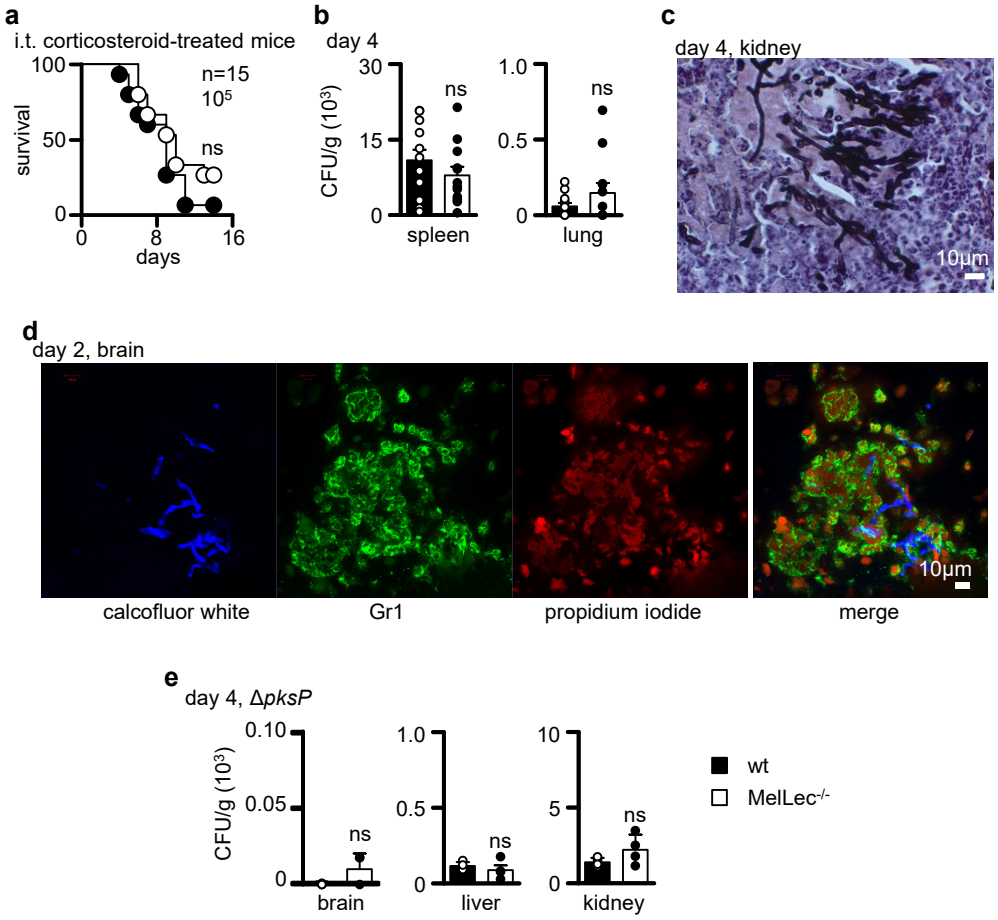


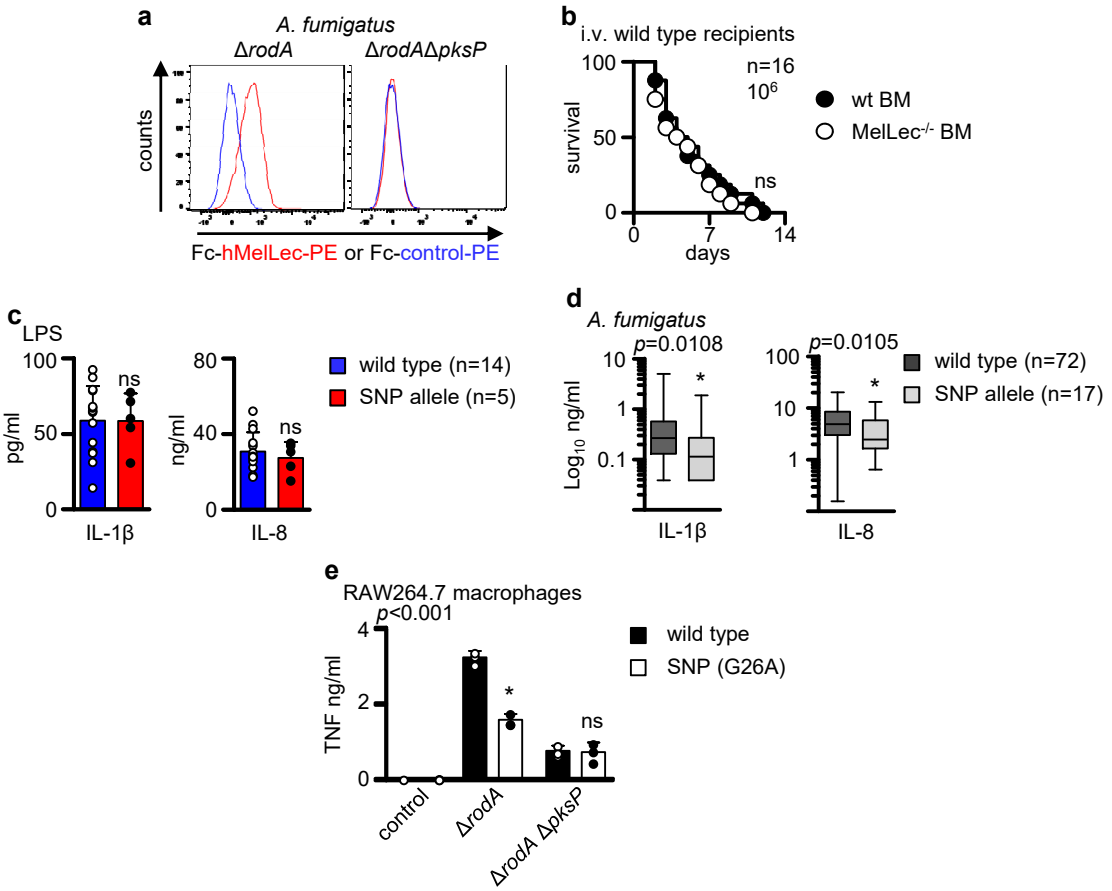
Stappers et al Extended Data Figure 6



Stappers et al Extended Data Figure 7


a
i.t. immunocompetent mice
% survival
100
50
0
0 7 14 21
day
% starting weight
140
105
70
0 7 14 21
day
wt
MelLec-/-
b
SSC
47.6%
16.5%
FSC
CD45-PE-Cy7
c
wt
MelLec-/-
Ly6G-APC
30.1%
8.8%
CD11b-PerCP-Cy5.5
d
4h
neutrophils/mL x10^4
p=0.0002
10^7
e
p=0.0002
p=0.0012
pg/mg
KC
GM-CSF
f
4hr, melanin ghosts
p=0.0021
neutrophils/ml x10^4
g
24h
neutrophils/mL x10^4
ns
10^7
h
24hr, 10^7
cells/ml (x10^4)
ns
inflammatory MØ
eosinophils
alveolar MØ
i
counts
αMelLec-PE-CF594
j
4h, ΔpksP
neutrophils/mL x10^4
ns
10^7
k
ΔpksP
wt
MelLec-/-
Ly6G-APC
22%
24.8%
CD11b-PerCP-Cy5.5


a
i.t. corticosteroid-treated mice
100
50
0
survival
n=15
10^5
ns
0
8
16
days
b
day 4
30
15
0
CFU/g (10^3)
ns
spleen
1.0
0.5
0
ns
lung
c
day 4, kidney
10µm
d
day 2, brain
10µm
calcofluor white
Gr1
propidium iodide
merge
e
day 4, ΔpksP
0.10
0.05
0
CFU/g (10^3)
ns
brain
1.0
0.5
0
ns
liver
10
5
0
ns
kidney
wt
MelLec-/-


a
A. fumigatus
ΔrodA
ΔrodAΔpksP
counts
Fc-hMelLec-PE or Fc-control-PE
b
i.v. wild type recipients
n=16
10^6
survival
100
50
0
ns
0
7
14
days
wt BM
MelLec-/- BM
c
LPS
pg/ml
100
50
0
p
ns
IL-1β
ng/ml
80
40
0
n
ns
IL-8
wild type (n=14)
SNP allele (n=5)
d
A. fumigatus
p=0.0108
Log10 ng/ml
10
1
0.1
*
IL-1β
p=0.0105
100
10
1
*
IL-8
wild type (n=72)
SNP allele (n=17)
e
RAW264.7 macrophages
p<0.001
TNF ng/ml
4
2
0
*
ns
control
ΔrodA
ΔrodA ΔpksP
wild type
SNP (G26A)