HOKKAIDO UNIVERSITY

Title	Autophagy inhibits viral genome replication and gene expression stages in West Nile virus infection
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Fig. 1

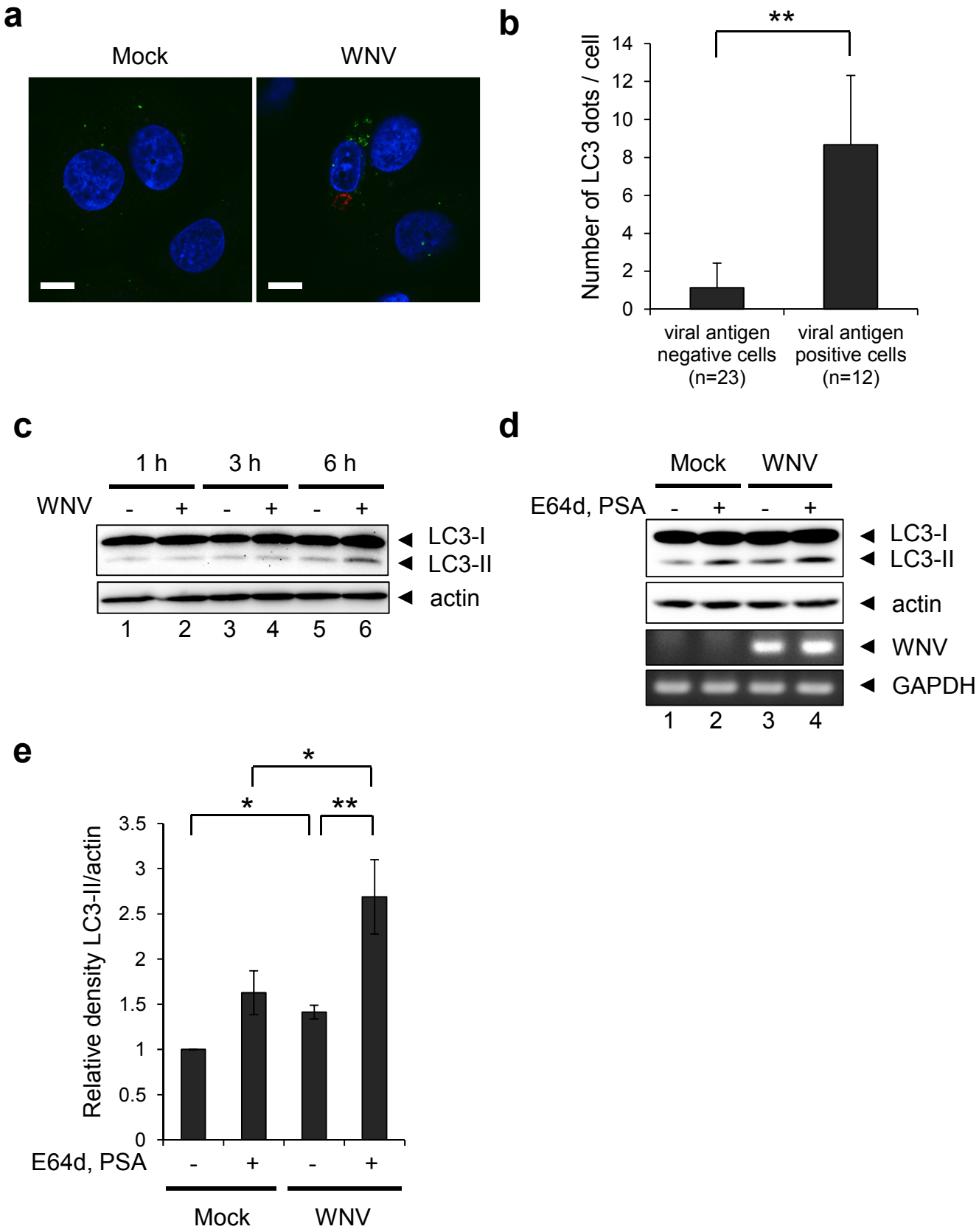

a
Mock
WNV
b
**
Number of LC3 dots / cell
14
12
10
8
6
4
2
0
viral antigen negative cells (n=23)
viral antigen positive cells (n=12)
c
1 h
3 h
6 h
WNV
- + - + - +
LC3-I
LC3-II
actin
1 2 3 4 5 6
d
Mock
WNV
E64d, PSA
- + - +
LC3-I
LC3-II
actin
WNV
GAPDH
1 2 3 4
e
*
*
**
Relative density LC3-II/actin
3.5
3
2.5
2
1.5
1
0.5
0
E64d, PSA
- + - +
Mock
WNV

Fig. 2

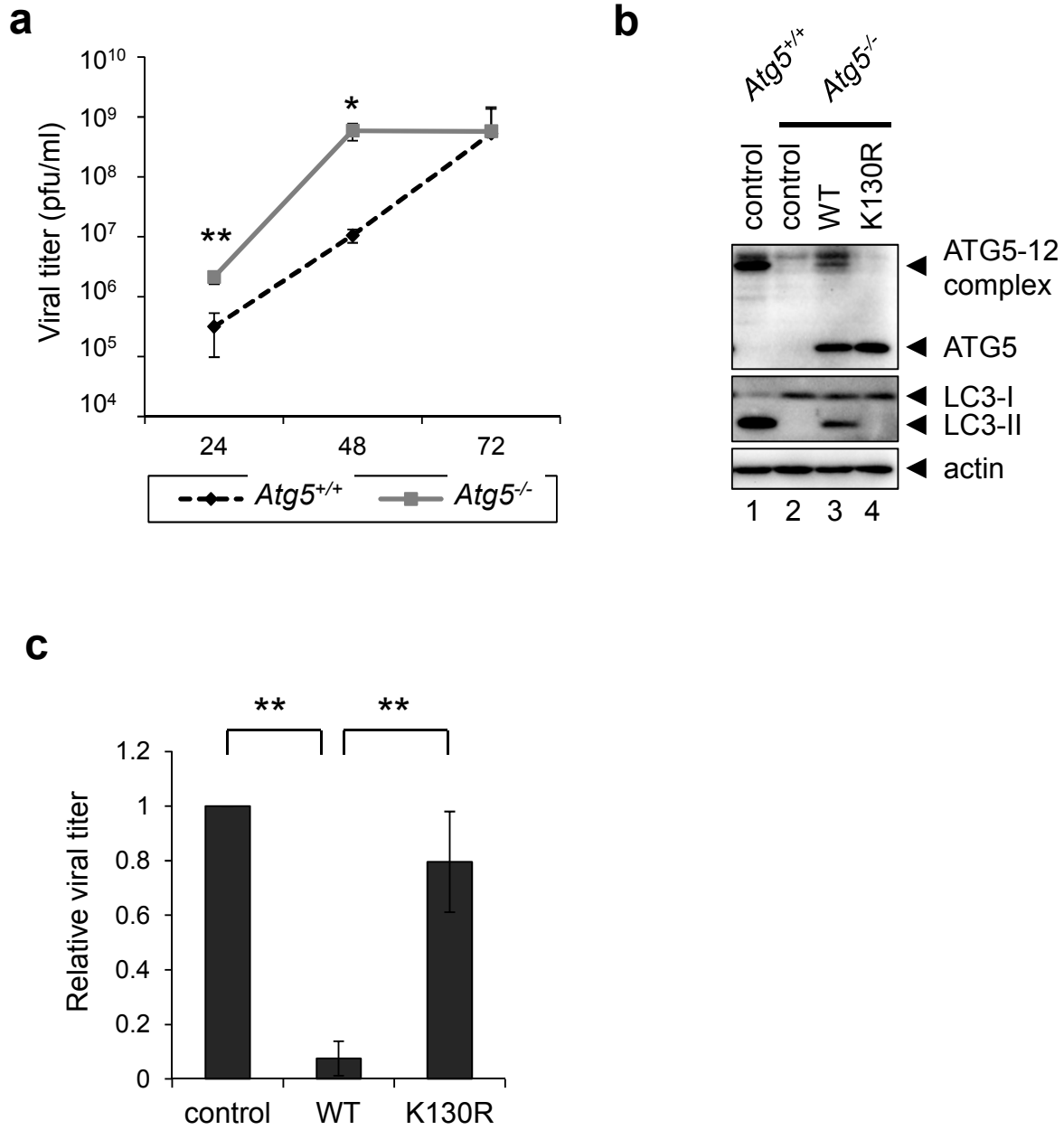

a
Viral titer (pfu/ml)
10^10
10^9
10^8
10^7
10^6
10^5
10^4
**
*
24
48
72
Atg5+/+
Atg5-/-
b
Atg5+/+
Atg5-/-
control
control
WT
K130R
ATG5-12 complex
ATG5
LC3-I
LC3-II
actin
1 2 3 4
c
**
**
Relative viral titer
1.2
1
0.8
0.6
0.4
0.2
0
control
WT
K130R

Fig. 3

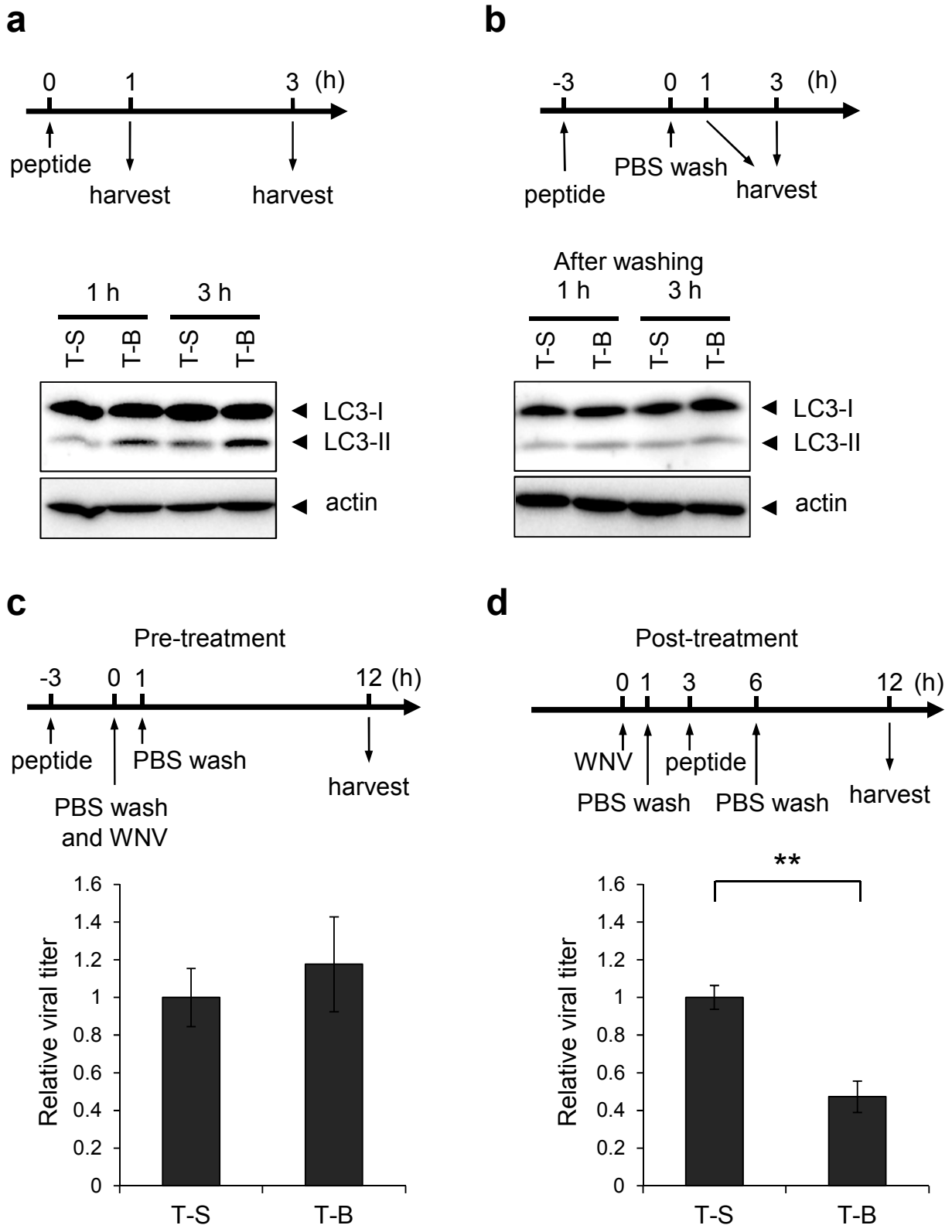
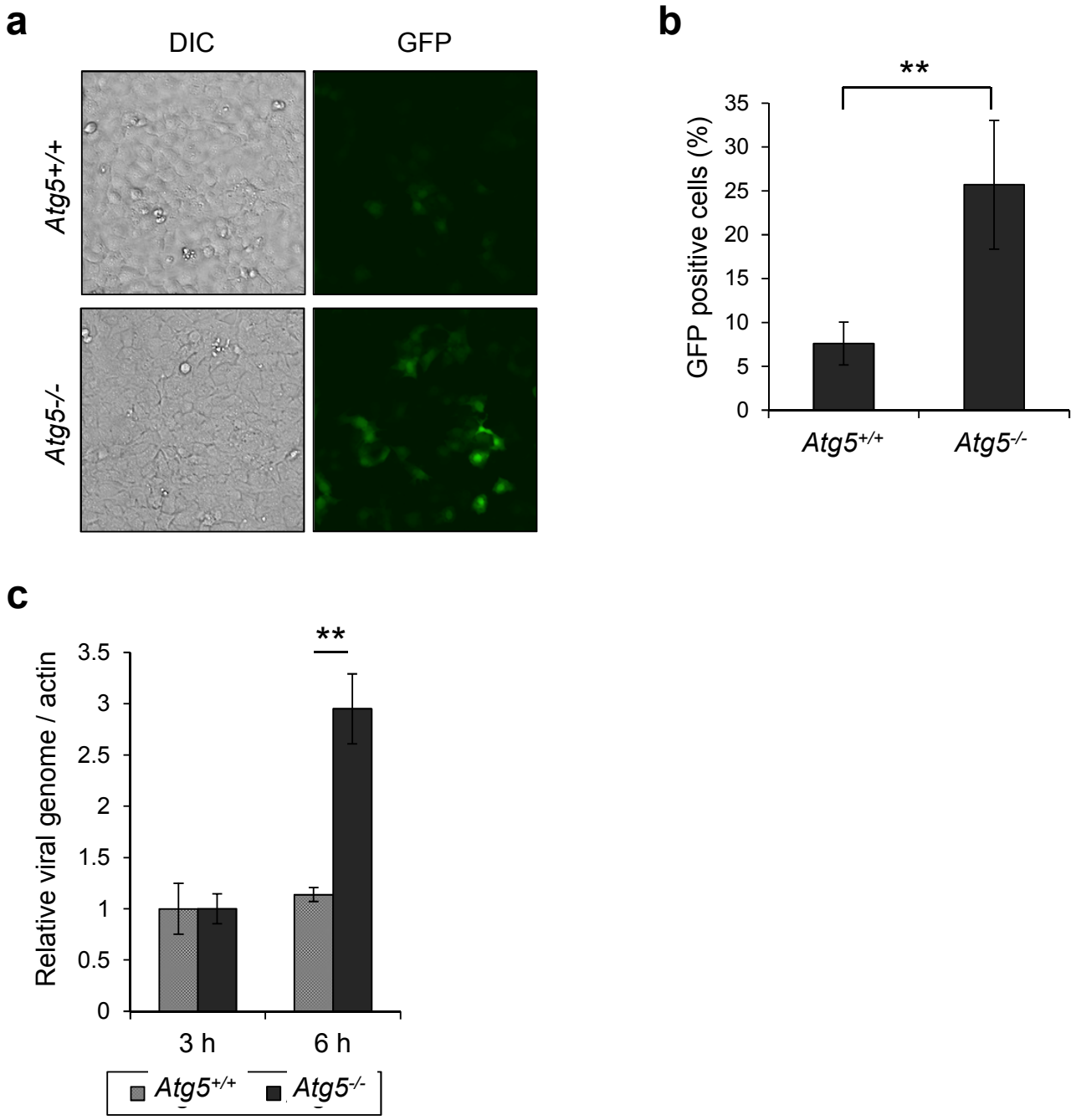
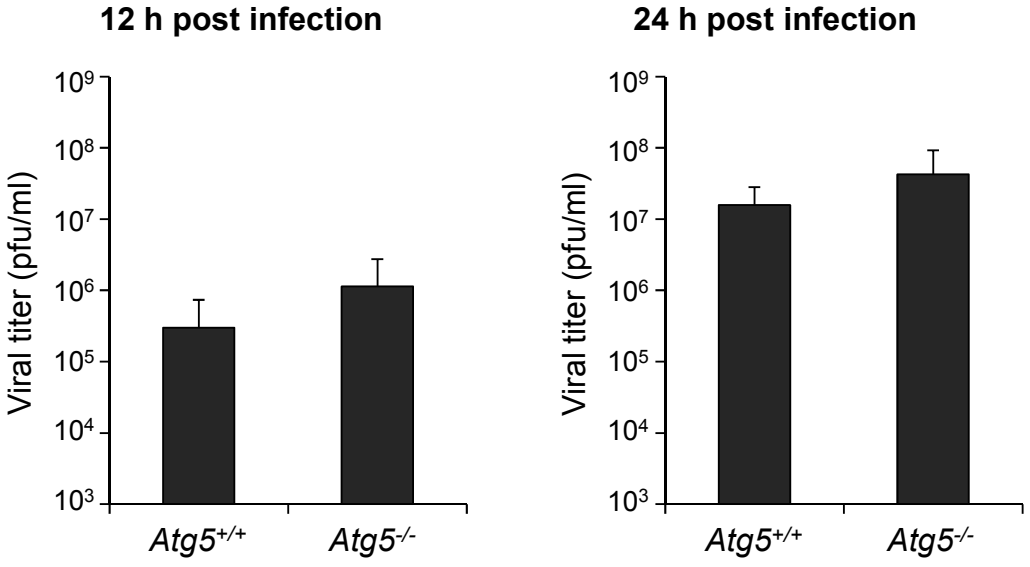

a
0
1
3 (h)
peptide
harvest
harvest
1 h
3 h
T-S
T-B
T-S
T-B
LC3-I
LC3-II
actin
b
-3
0
1
3 (h)
peptide
PBS wash
harvest
After washing
1 h
3 h
T-S
T-B
T-S
T-B
LC3-I
LC3-II
actin
c
Pre-treatment
-3
0
1
12 (h)
peptide
PBS wash
harvest
PBS wash
and WNV
Relative viral titer
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
T-S
T-B
d
Post-treatment
0
1
3
6
12 (h)
WNV
peptide
PBS wash
PBS wash
harvest
**
Relative viral titer
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
T-S
T-B

Fig. 4


a
DIC
GFP
Atg5+/+
Atg5-/-
b
**
GFP positive cells (%)
35
30
25
20
15
10
5
0
Atg5+/+
Atg5-/-
c
**
Relative viral genome / actin
3.5
3
2.5
2
1.5
1
0.5
0
3 h
6 h
Atg5+/+
Atg5-/-

Supplemental Fig. S1



Supplemental Fig. S2