Figure S1.

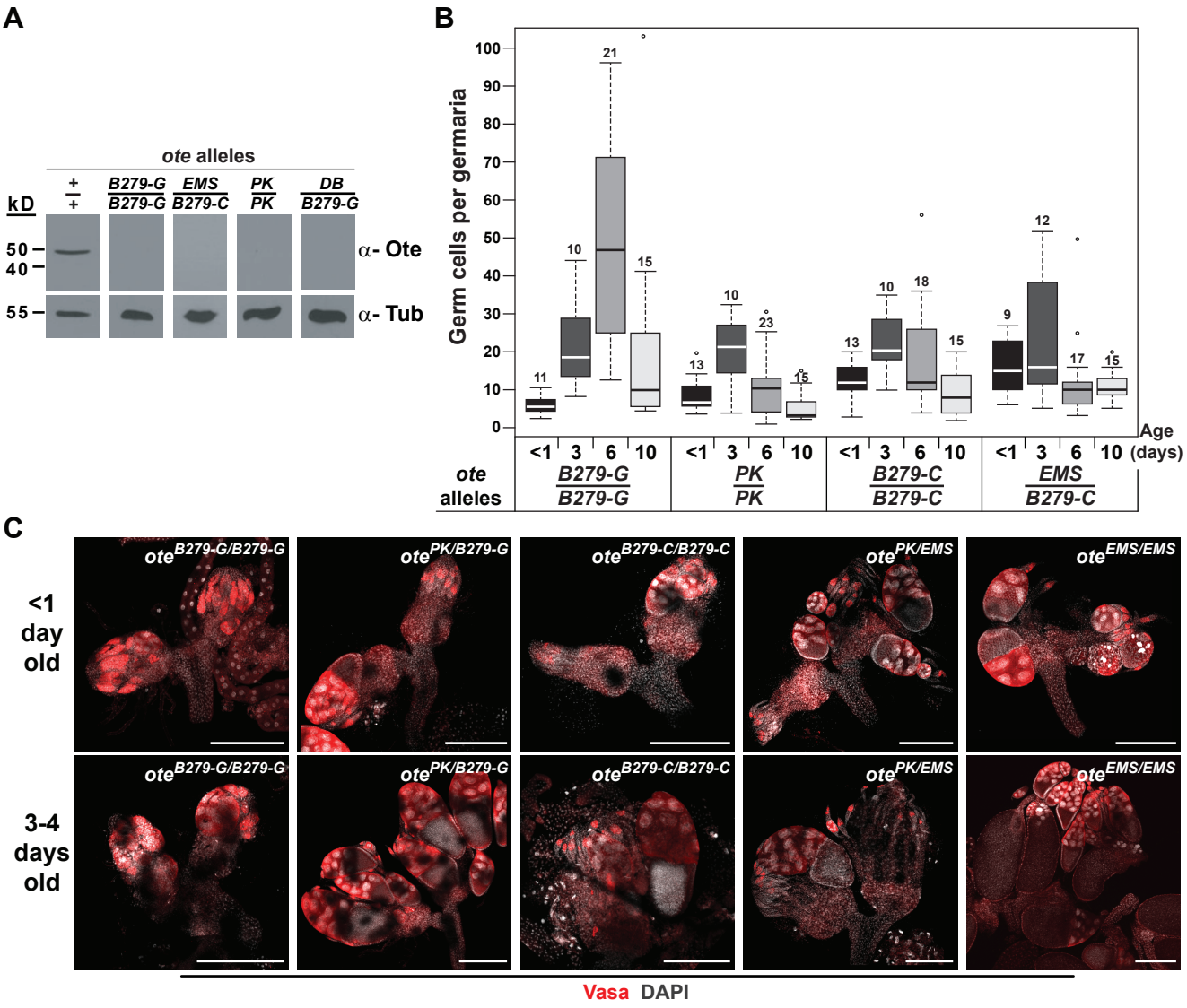
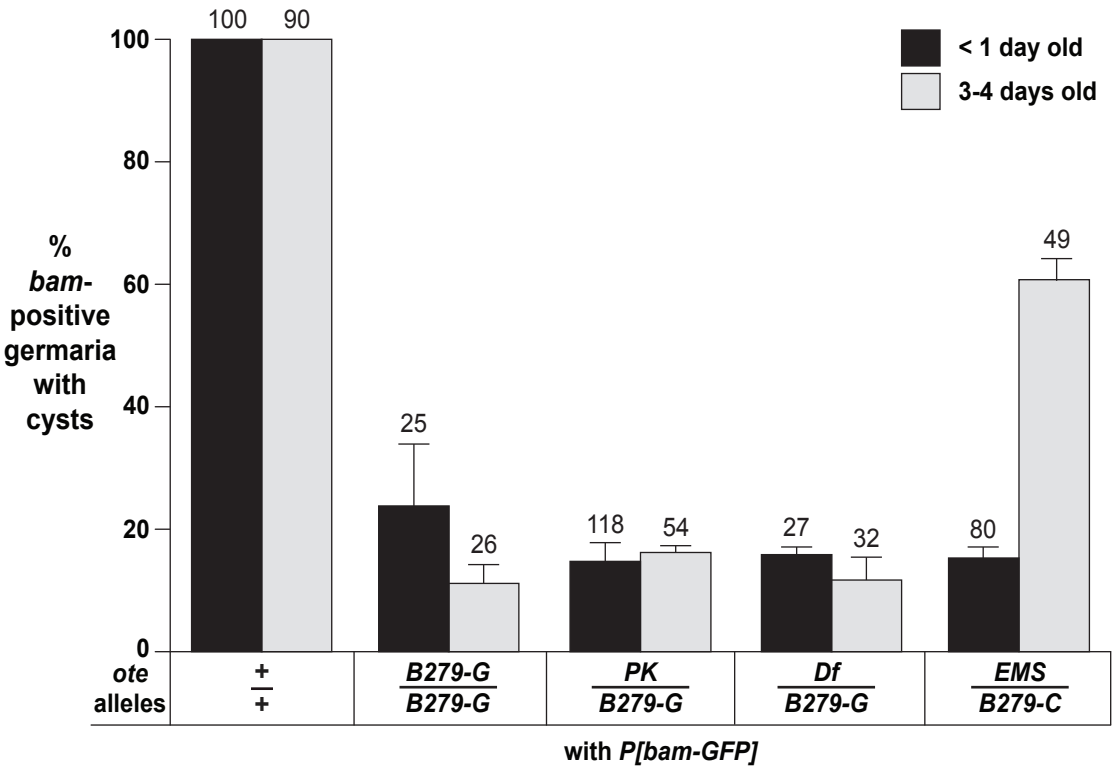

A
ote alleles
kD
+/+
B279-G/B279-G
EMS/B279-C
PK/PK
DB/B279-G
50
40
55
α- Ote
α- Tub
B
Germ cells per germaria
Age (days)
ote alleles
B279-G/B279-G
PK/PK
B279-C/B279-C
EMS/B279-C
C
<1 day old
3-4 days old
oteB279-G/B279-G
otePK/B279-G
oteB279-C/B279-C
otePK/EMS
oteEMS/EMS
Vasa DAPI

Figure S2.


100
90
25
26
118
54
27
32
80
49
< 1 day old
3-4 days old
% bam-positive germaria with cysts
100
80
60
40
20
0
ote alleles
+ / +
B279-G / B279-G
PK / B279-G
Df / B279-G
EMS / B279-C
with P[bam-GFP]

Supplemental Information

Figure S1. Germline phenotypes in *ote*$^{-/-}$ females change with age, related to Figure 1. A. Shown is a western analysis of *ote*$^{+/+}$ and *ote*$^{-/-}$ ovary lysates using an antibody raised against the N-terminal third of Otefin (Ote) and α-Tubulin (Tub) as a loading control. Two *ote*$^{+/+}$ ovary pairs and twenty to fifty *ote*$^{-/-}$ ovary pairs were loaded per lane. Molecular weightsare shown to the left. **B.** Shown is a box plot of data obtained from quantification of the number of spectrosome containing germ cells in *ote*$^{-/-}$ germaria over ten days of adult development. The age and genotype of females are listed below each box plot. The shaded box represents the 25th to 75th quartiles. The top whisker represents the 5th to 25th percentile and the bottom whisker represents the 75th to 95th percentile. Numbers above the 95th percentile and below the 5th percentile are shown as dots. The horizontal bar indicates the median number of germ cells with spectrosomes. The number of germaria analyzed is indicated above the top of each box plot whisker. **C.** Shown are images of whole *ote*$^{-/-}$ ovaries obtained from less than one day old (top panels) and three day old (bottom panels) females. Ovaries were stained for Vasa (red) and DAPI (grey). Ovaries are oriented with anterior towards the top of the image. Genotypes are listed in the top right corner of each image. Scale bars represent 250 μm.

Figure S2. The majority of *bam*-positive *ote*$^{-/-}$ germaria exhibit blocked differentiation, related to Figure 3. Shown is the percentage of GFP (*bam*)-positive germaria that contained fusomes from germaria studied in Figure 3, which indicates cyst formation and differentiation. The total number of GFP-positive germaria analyzed is

shown above the bar. Error bars represent the standard deviation of data obtained from two independent experiments.