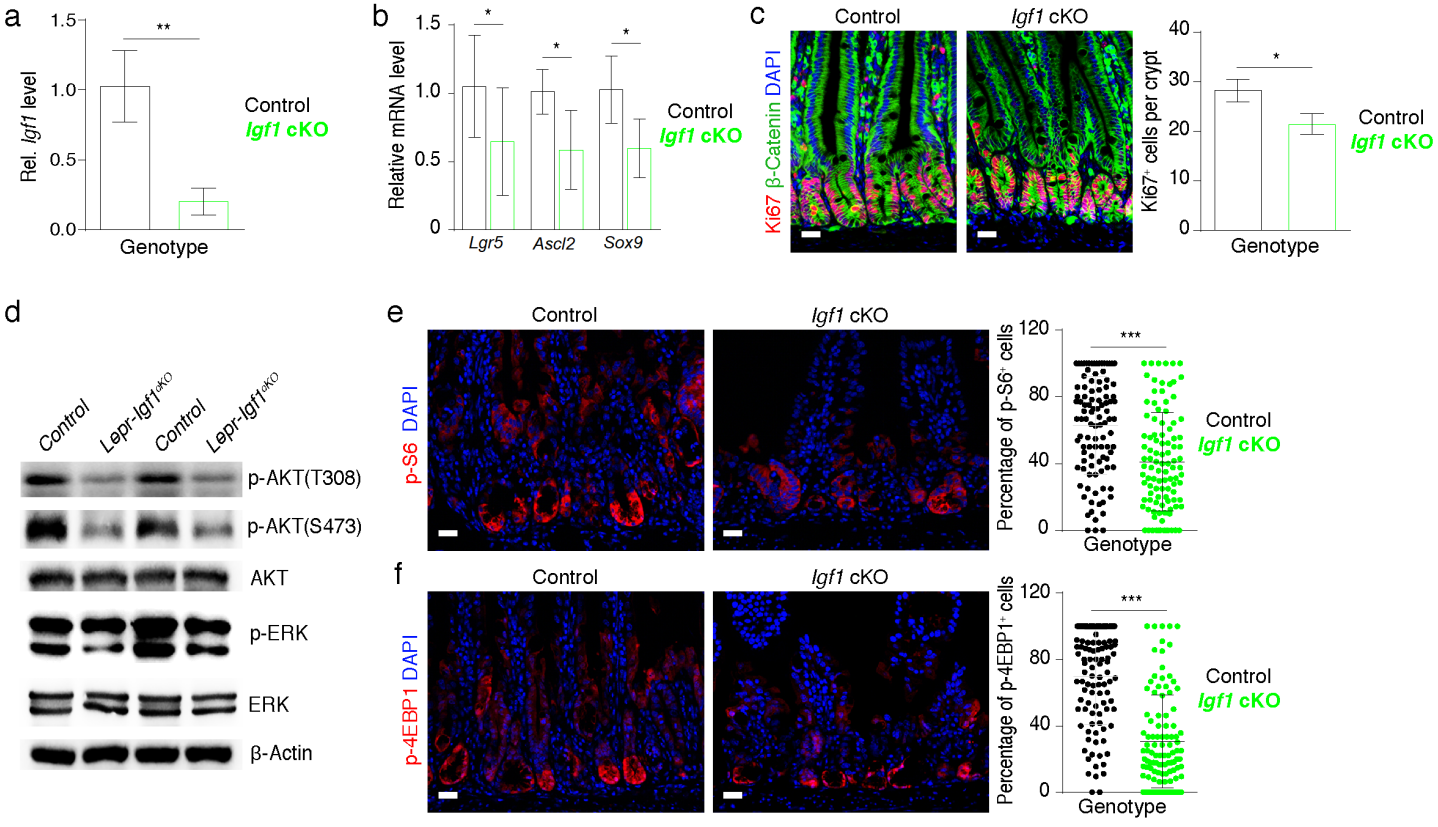
a
Rel. Igf1 level
1.5
1.0
0.5
0.0
**
Control
Igf1 cKO
Genotype
b
Relative mRNA level
1.5
1.0
0.5
0
*
*
*
Lgr5
Ascl2
Sox9
Control
Igf1 cKO
c
Control
Igf1 cKO
Ki67 β-Catenin DAPI
Ki67+ cells per crypt
40
30
20
10
0
*
Control
Igf1 cKO
Genotype
d
Control
Lepr-Igf1cKO
Control
Lepr-Igf1cKO
p-AKT(T308)
p-AKT(S473)
AKT
p-ERK
ERK
β-Actin
e
Control
Igf1 cKO
p-S6 DAPI
Percentage of p-S6+ cells
120
80
40
0
***
Control
Igf1 cKO
Genotype
f
Control
Igf1 cKO
p-4EBP1 DAPI
Percentage of p-4EBP1+ cells
120
80
40
0
***
Control
Igf1 cKO
Genotype

Fig. S5 Deletion of *Igf1* suppressed p-AKT and pS6 activity. a qRT-PCR analysis for *Igf1* in the intestine of control and *Igf1* cKO mice (n=3). **b** qRT-PCR analysis for *Lgr5*, *Ascl2* and *Sox9* in the jejunum of control and *Igf1* cKO mice (n=3). **c** Immunofluorescence for Ki67 and β-Catenin in jejunum of control and *Igf1* cKO mice. Quantification of $Ki67^+$ cells per crypt (n=3). Scale bar: 25 μm. **d** Western blotting for p-AKT(T308), p-AKT(S473), AKT, p-ERK and ERK in jejunum from control and *Igf1* cKO mice 3 days postirradiation. β-Actin was used as a loading control. **e, f** Immunofluorescence for p-S6 (**e**) and p-4EBP1 (**f**) in the jejunum from control and *Igf1* cKO mice three days postirradiation. The percentage of $p\text{-}S6^+$ and $p\text{-}4EBP1^+$ cells in each focus was quantified. Scale bar: 25 μm. Values in the graphs represent means ± SD. Unpaired student's t-test was used for calculating P values in **a** - **c** and **e**, **f**, *P < 0.05; ***P* < 0.01; ****P* < 0.001.