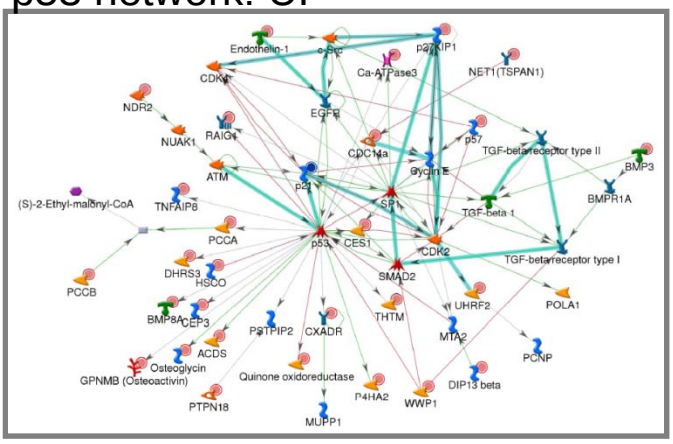
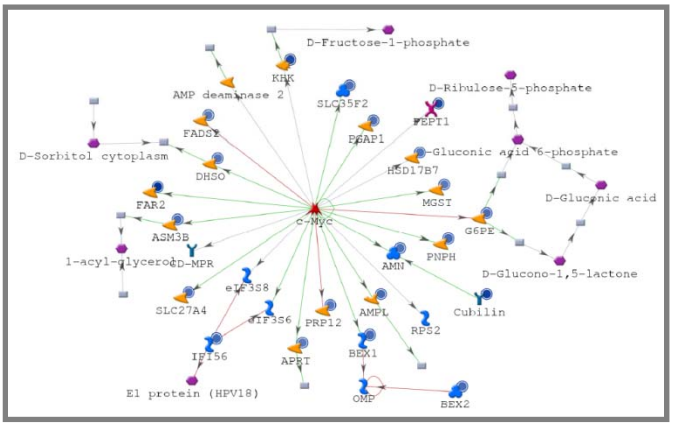
A p53 network: UP



B c-MYC network: DOWN



C Legend

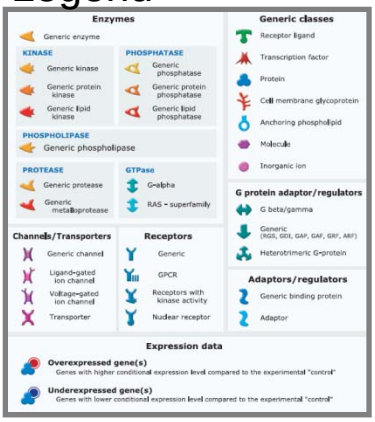


Fig. S1. Intestinal *Gata6* deletion alters gene networks controlling cell proliferation in the mature ileum. Network analyses on microarray data of *Ctl* and *Gata6ΔIE* ileum (n=3 in each group) revealed (A) an increase in targets of the tumor surpressor gene p53, and (B) a decrease in targets of the proto-oncogene c-MYC. (C) Legend defining symbols used in the networks. Arrows indicate the direction of the interaction. Red circles = up-regulated transcripts; Blue circles = down-regulated transcripts. Differentially expressed transcripts were determined at the 5% FDR level using Significance Analysis of Microarrays (SAM) and interaction networks were developed from the differentially expressed transcripts using Metacore.

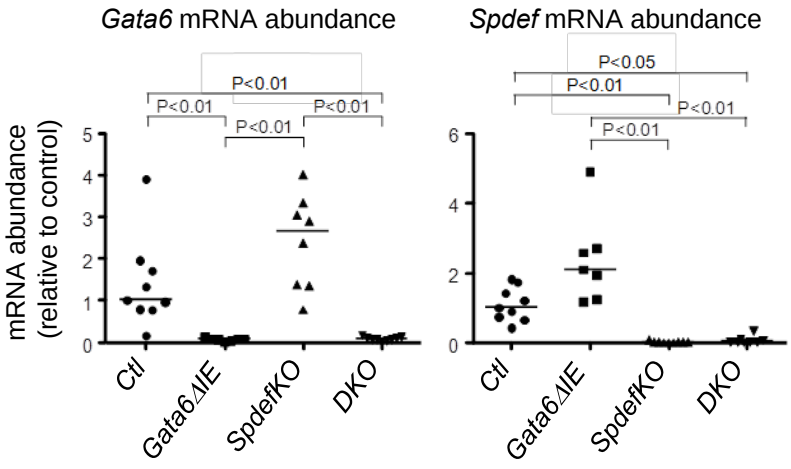


Fig. S2. *Gata6* and *Spdef* mRNA abundance in ileum in each group of mice. *Gata6ΔIE* and *DKO* mice had significantly lower *Gata6* mRNA abundances than *Ctl* and *SpdefKO* mice. *SpdefKO* and *DKO* mice had significantly lower *Spdef* mRNA abundances than *Ctl* and *Gata6ΔIE* mice.

A qRT-PCR primers

hGata6:	Sense:	5’-GACTTGCTCTGGTAATAG-3’
	Antisense:	5’-CTGTAGGTTGTGTTGTGG-3’
hSpdef:	Sense:	5’-AACATCACCGCAGATCCC-3’
	Antisense:	5’-CGGTATTGGTGCTCTGTC-3’
hGapdh:	Sense:	5’-AAGTATGACAACAGCCTC-3’
	Antisense:	5’-ATGAGTCCTTCCACGATA-3’
mGata6:	Sense:	5’-CAGCAAGCTGTTGTGGTC-3’
	Antisense:	5’-GTCTGGTACATTTCCTCCG-3’
mSpdef:	Sense:	5’-CAACAAGGAGAAAGGCATCTT-3’
	Antisense:	5’-GCGGCTTAGTTTATCATAGTTCA-3’
mChga:	Sense:	5’-CACAGCCACCAATACC-3’
	Antisense:	5’-TCTTCCTCCTCCTCTTC-3’
mNeurog3:	Sense:	5’-CTCAGCAAACAGCGAAGAAG-3’
	Antisense:	5’-GGGAAGGTGGGCAGGAC-3’
mLyz:	Sense:	5’-ACTCCTCCTTGCTTTCTGTC-3’
	Antisense:	5’-GTCGGTGCTTCGGTCTC-3’
mMuc2:	Sense:	5’-AACTACCACTGTGATGCCAATG-3’
	Antisense:	5’-ACAATGTTGATGCCAGACTCG-3’
mApoa1:	Sense:	5’-GGACTTCTGGGATAACCT-3’
	Antisense:	5’-GCACCTTCTGTTTCACTT-3’
mCar1:	Sense:	5’-AACAGAATTATGTCAGTGCTAA-3’
	Antisense:	5’-AGAGAATGAATCACTTAGTTGTAA-3’
mGapdh:	Sense:	5’-GCCTTCCGTGTTCCTACCC-3’
	Antisense:	5’-TGCCTGCTTCACCACCTTC-3’

B ChIP primers

hSpdef (-40 kb), region 1:
Sense: 5'-AAAGGTCTTCCTCCAAAATG-3'
Antisense: 5'-CAAAGCAGTAAGACTTGGAG-3'

hSpdef (-40 kb), region 2:
Sense: 5'-CAGTTTGAATCCATCCTCC-3'
Antisense: 5'-CCTATCTTCAAAGCATTTACTATCT-3'

hSpdef (-40 kb), region 3:
Sense: 5'-CTATGGATTGGTCACATCTAC-3'
Antisense: 5'-GTTTGAGGGTCTTGAACTT-3'

Amy1 TSS:
Sense: 5'-GGAAAATAAAGGGTTGGAGC-3'
Antisense: 5'-AGTGAATCATGTCAGTATAACAA-3'

C Genotype primers

Gata6:	Sense:	5'-GTGGTTGTAAGGCGGTTTGT-3'
	Antisense:	5'-ACGCGAGCTCCAGAAAAAGT-3'
Cre:	Sense:	5'-CGTATAGCCGAAATTGCCAG -3'
	Antisense:	5'-CAAAACAGGTAGTTATTCGG-3'
Spdef:	WTSense:	5'-CCCACCTCCTATGTCAGCCATGGC-3'
	Antisense:	5'-CAATCCTGTACCATATCTGGCATGG-3'
	KO Sense:	5'-GCATCGCATTGTCTGAGTAGGTGTCA-3'

Fig. S3. Primers used for: (A) qRT-PCR, (B) ChIP assays, and (C) genotyping.

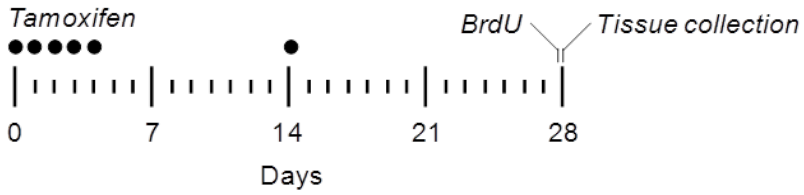


Fig. S4. Timeline for study. Mice 4 wks of age were given Tamoxifen as indicated (*black circle*) beginning on Day 0, and an injection of BrdU 2 hr before tissue collection at Day 28.