

Table S1. *Pten*<sup>ΔC</sup> affected genes by aCGH, related to Figure 5

Chromosome	Position	Log Ratio	Affected Genes
1	102198240- 102201788	-2.8173	Cntnap5b
1	173512476- 173516924	-1.0636	Cd244
1	90103575- 90209449	0.231	Ugt1a, Heatr7b1, Hjurp, Trpm8
1	175808526-175910226	1.314	Mndal, Mnda, Ifi203, Ifi202b
2	155441539- 155442750	-1.9986	Myh7b
3	84647205- 84654237	-0.7657	Fbxw7
6	56225369- 56232669	1.4071	Pde1c
7	26790284- 26981840	0.6325	Cyp2b 13, Cyp2b9
8	115311513- 115314868	-0.2308	<b>Wwox</b>
10	73965817- 73967099	1.0636	Pcdh15
12	42026419- 42030776	-3.4643	Immp2l
14	11057433- 11064594	-0.2682	<b>Fhit</b>
18	9815537- 10024200	-0.5089	Colec12, Thoc1, Usp14

Knock-in of *Pten*<sup>ΔC</sup> causes gene copy number changes. Gene copy number alteration was analyzed in *Pten*<sup>+/+</sup> and *Pten*<sup>+/<sup>ΔC</sup></sup> MEFs using a comparative genomic hybridization array (aCGH). Two common fragile site genes, *Wwox* and *Fhit*, are highlighted among selected genes affected by *Pten*<sup>ΔC</sup> knock-in.

Table S2. Comparison between *Pten*<sup>+ΔC</sup> mice and *Pten*<sup>+/-</sup> mice

	<i>Pten</i> <sup>+/-</sup> [1]	<i>Pten</i> <sup>+/-</sup> [2]	<i>Pten</i> <sup>+/-</sup> [3,4]		<i>Pten</i> <sup>+ΔC</sup>
Age	6-22 weeks	6-30 weeks	8-32 weeks	26-66 weeks	12-60 weeks
Breast	N/A	N/A	N/A	32/65	6/21 (benign) 2/21 (malignant)
Thyroid	3/20 (neoplasia) 1/20 (carcinoma)	1/20 (carcinoma)	N/A	N/A	11/31 (adenoma) 2/31 (carcinoma)
Gastrointestinal polyps	All	All 3/20 (colon cancer)	Most	7/81	25/35
Endometrial	20/20 (AH)	N/A	N/A	65/65 (hyper) 14/65 (car)	13/21 (hyperplasia)
Skin & mucosa	N/A	9/20 (hyperkeratosis)	N/A	N/A	3/30
Prostate	3/8 (PIN)	All (hyperplasia)	1/66 (cancer)	1/16 (carcinoma) 4/16 (PIN)	7/14 (PIN)
Lymphoma	7/256 (T cell)	N/A	8/66 (T cell)	15/83	6/35 (B cell)
Adrenal	N/A	N/A	N/A	9/81 (>35 w)	20/33 (4 metastasis)

- [1] Podsypanina K et al. Mutation of *Pten*/*Mmac1* in mice causes neoplasia in multiple organ systems. *Proc Natl Acad Sci U S A*. 1999 Feb 16;96(4):1563-8.
- [2] Di Cristofano A et al. *Pten* is essential for embryonic development and tumour suppression. *Nat Genet*. 1998 Aug;19(4):348-55.
- [3] Suzuki A et al. High cancer susceptibility and embryonic lethality associated with mutation of the *PTEN* tumor suppressor gene in mice. *Curr Biol*. 1998 Oct 22;8(21):1169-78.
- [4] Stambolic V et al. High incidence of breast and endometrial neoplasia resembling human Cowden syndrome in *pten*<sup>+/-</sup> mice. *Cancer Res*. 2000 Jul 1;60(13):3605-11.