

**Fig. 1 Measurements**

Background	Measure	<i>Apc<sup>Min/+</sup>, Erbb3<sup>fl/fl</sup></i>	<i>Apc<sup>Min/+</sup>, Erbb3<sup>fl/fl</sup>, Tg(Vil1-Cre)</i>
C57BL/6J	Intestinal polyp number	118.8 +/- 29.0	266.1 +/- 55.6
	Colon polyp number	1.2 +/- 1.1	3.0 +/- 0.8
	Duodenum polyp size	2.1 +/- 0.2	1.7 +/- 0.1
	Proximal jejunum polyp size	1.5 +/- 0.1	0.9 +/- 0.1
	Distal jejunum polyp size	0.7 +/- 0.1	0.6 +/- 0.1
	Ileum polyp size	1.0 +/- 0.1	1.0 +/- 0.1
	Colon polyp size	3.2 +/- 0.3	1.0 +/- 0.2
B6129 hybrid	Intestinal polyp number	118.9 +/- 20.9	136.7 +/- 28.0
	Colon polyp number	1.1 +/- 1.1	1.0 +/- 0.7
	Duodenum polyp size	2.1 +/- 0.2	1.2 +/- 0.1
	Proximal jejunum polyp size	1.5 +/- 0.1	0.9 +/- 0.1
	Distal jejunum polyp size	1.1 +/- 0.1	0.7 +/- 0.1
	Ileum polyp size	1.0 +/- 0.1	1.0 +/- 0.2
	Colon polyp size	3.2 +/- 0.3	2.9 +/- 0.2
B6;129 mix	Intestinal polyp number	117.3 +/- 26.1	46.0 +/- 16.3
	Colon polyp number	1.4 +/- 1.0	0.7 +/- 0.1
	Duodenum polyp size	2.1 +/- 0.2	0.9 +/- 0.1
	Proximal jejunum polyp size	1.5 +/- 0.1	0.8 +/- 0.1
	Distal jejunum polyp size	1.1 +/- 0.1	0.6 +/- 0.1
	Ileum polyp size	1.0 +/- 0.1	0.6 +/- 0.1
	Colon polyp size	3.2 +/- 0.3	1.9 +/- 0.2

**Fig. 4 Measurements**

Background	Measure	<i>Erbb3<sup>+/+</sup>, R26R<sup>fl/fl</sup>, Tg(Vil1-Cre)</i>	<i>Erbb3<sup>fl/fl</sup>, R26R<sup>fl/fl</sup>, Tg(Vil1-Cre)</i>
C57BL/6J	Colon polyp number	1.7 +/- 1.9	4.2 +/- 2.4
	Colon polyp size	3.9 +/- 0.1	3.8 +/- 0.1

**Fig. 5 Measurements**

Background	Measure	<i>Apc<sup>Min/+</sup>, Egfr<sup>fl/fl</sup>, Erbb3<sup>fl/fl</sup></i>	<i>Apc<sup>Min/+</sup>, Egfr<sup>fl/fl</sup>, Erbb3<sup>fl/fl</sup>, Tg(Vil1-Cre)</i>
C57BL/6J	Intestinal polyp number	118.1 +/- 21.4	9.0 +/- 3.6
	Intestinal polyp size	1.9 +/- 0.1	0.4 +/- 0.1