Figure 5. TAB1 is involving in BMP signaling cascade.

A. Expression analysis of *Id1* in *Tab1* mutants at E16.5. *Id1* expression levels were downregulated in mesenchymal regions of intestine in *Tab1* mutant embryos.

B. Wild type and *Tab1*-deficient (-/-) MEFs were cultured with BMP4 and *Id1* expression was determined by RT-PCR. An increase in *Id1* expression levels was observed in BMP4-treated control MEFs, however there was no induction of *Id1* expression in *Tab1*-deficient (-/-) MEFs after stimulated by BMP4.  $\beta$ -actin was used as an internal control.

Supplemental figure 1.

Protein extracts from keratinocytes derived from newborn skin were subjected to western blotting using an anti-TAB1 antibody that recognizes the C-terminus of TAB1. Two forms of TAB1 (xx kd, phosphorylated and xx kd, native) were identified. An anti-TAK1 antibody was also used for the same blot (xx kd) to show as a loading control.

Supplemental figure 2.

RNA was extracted from wild type MEF cells (+/+) or cells homozygous for the Cre-recombined allele ( $\Delta E/\Delta E$ ), and the expression of transcripts from the *Tab1* locus were examined. Primers for exon 2 and 3 (*Tab1*-N) and primers for exon 9 (*Tab1*-C) were used. Note that a transcript that encodes the C-terminal region

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was not detectable, while cells homozygous for the Cre-recombined allele still expressed Tab1 transcript encoding the N-terminal region.



## Inagaki et al., Supple Figure 1

Tab1-N Tab1-C



## 232 bp 210 bp



## Inagaki et al., Suppl. Figure 2