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Appendix Figure Legends

Appendix Figure S1: *Cyr61^{eGFP}* reporter specifically marks YAP-positive BCC tumors

A. *Cyr61^{eGFP}* reporter activity in YAP-positive versus YAP-negative BCC tumors from *Yap^{fl/fl}* (*Yap^{fl/fl}:R26LSL-SmoM2/+;K14CreER:Cyr61^{eGFP}*) mice. Purple arrows indicate YAP-positive BCC cells within a mosaic YAP expressing tumor; Yellow arrows indicate YAP-negative tumor clones or cells. Scale bar is 50 μ m.

Appendix Figure S2: TAZ is expressed at low levels in epithelial BCC tumors and does not contribute to BCC growth *in vivo*.

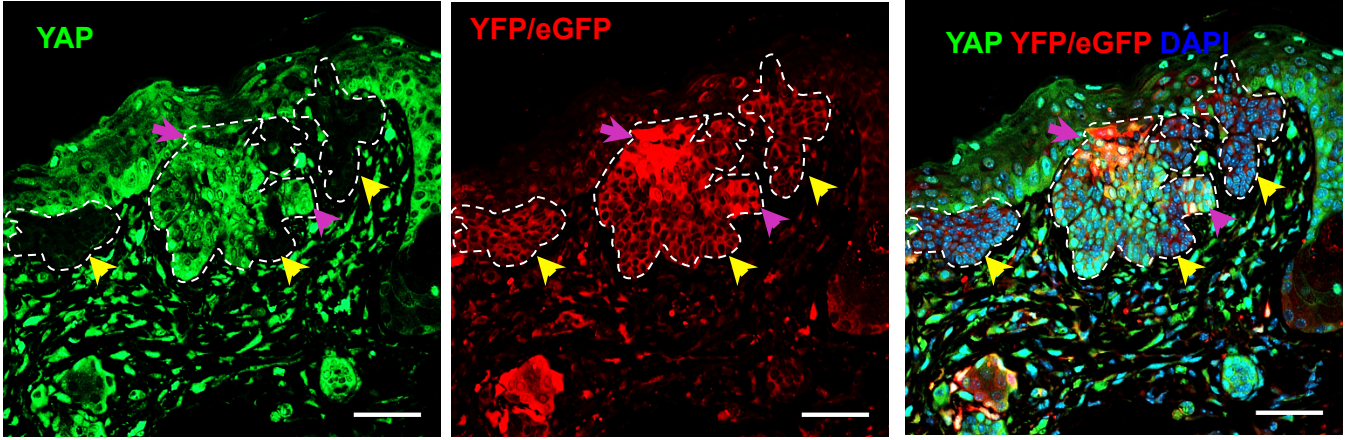
- A. Validation of YAP and YAP/TAZ antibodies in adult epidermis from *TetOCre rtTA Yap^{fl/fl}* mice. Low IHC signal with YAP/TAZ antibody is observed in basal keratinocytes (ear and tail). Scale bar is 50 μ m.
- B. Comparison of YAP and YAP/TAZ antibody staining pattern in serial sections from *Yap^{fl/fl}* BCC. Scale bar is 100 μ m.
- C. qPCR analyses of Yap and Taz mRNA expression in FACS-sorted *Yap^{+/+}* and *Yap^{fl/fl}* ear BCC (6 weeks post tamoxifen).
- D. Representative H&E images of ear BCC (8 weeks post tamoxifen) from *Yap^{fl/fl}* (*Yap^{fl/fl} R26^{LSL-SmoM2/+} K14CreER*) and *Yap^{fl/fl} Taz^{fl/fl}* (*Yap^{fl/fl} Taz^{fl/fl} R26^{LSL-SmoM2/+} K14CreER*) mice. Scale bar is 100 μ m.
- E. Ear BCC clone size quantification 8 weeks post tamoxifen administration in *Yap^{fl/fl}* and *Yap^{fl/fl} Taz^{fl/fl}* mice. n.s. – not significant.

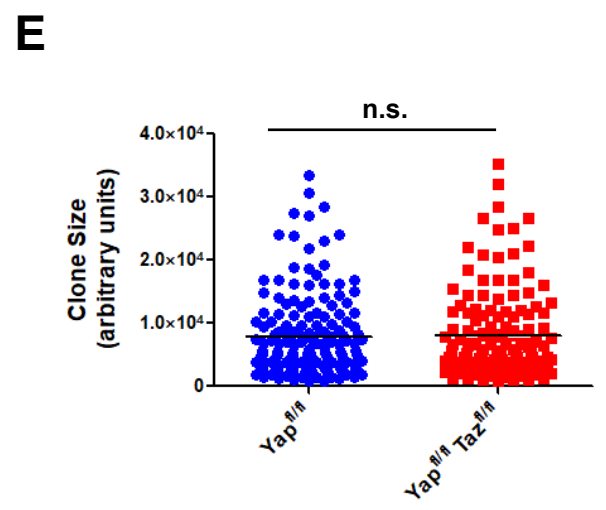
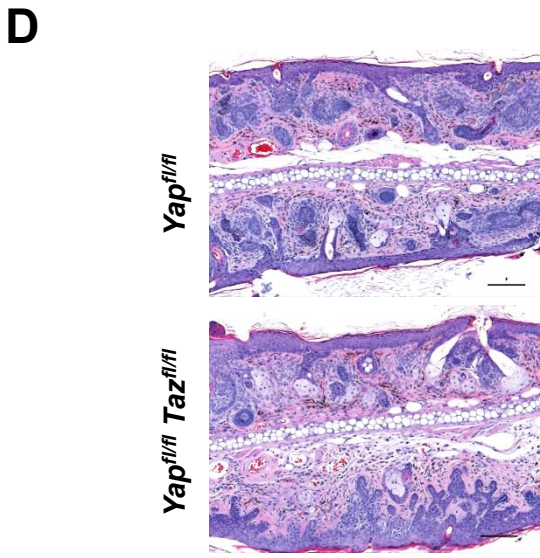
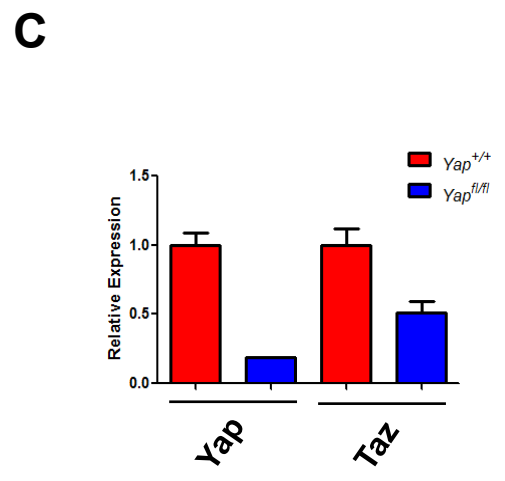
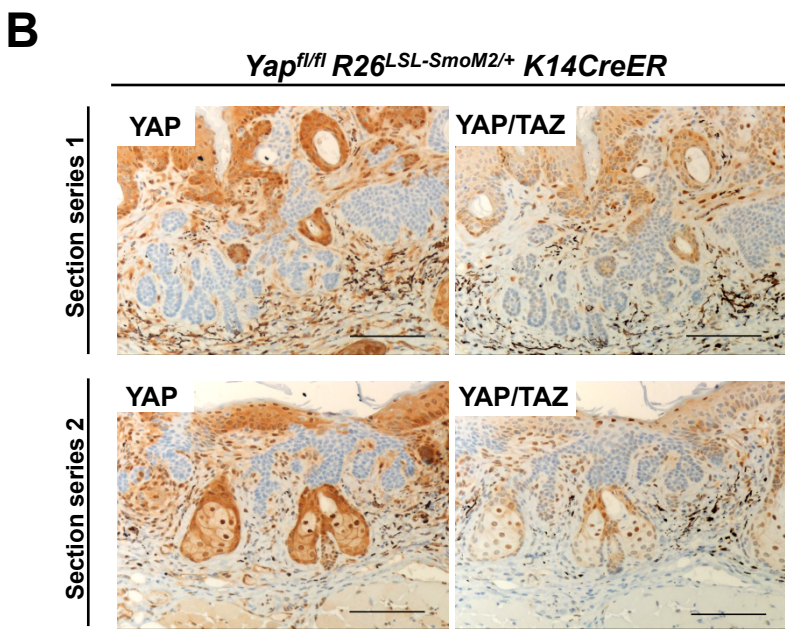
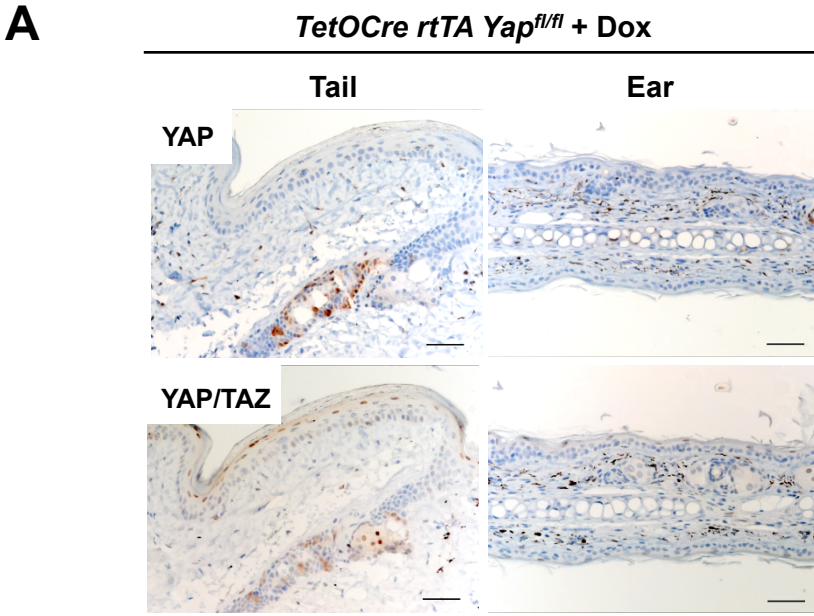
Appendix Figure S3. SmoM2-YFP and tdTomato expression overlaps in BCCs used for RNAseq analyses.

- A. Representative YFP (SmoM2-YFP) IF co-stained with tdTomato in BCC tumors ($R26^{SmoM2YFP/tdTomato} K14CreER$) 6 weeks post high dose tamoxifen. Scale bar is 50 μ m. Approximately 96% (Of 1745 tdTomato positive cells counted, 1682 cells were also SmoM2-YFP positive) of tdTomato expressing cells also co-express SmoM2-YFP.
- B. Representative YAP IHC in ear and tail BCCs from $Yap^{fl/fl}$ mice (6 post high dose tamoxifen). Ear epidermis has significantly higher Yap knockout efficiency compared tail epidermis (Ear = ~70% Yap -null BCCs; Tail = ~ 20% Yap -null BCCs).
- C. Representative YAP IF co-stained with GFP (SmoM2-YFP) in ear BCC from $Yap^{fl/fl}$ mice (6 post high dose tamoxifen). White arrows indicate YAP-positive BCC clone. Yap knockout efficiency in SmoM2-YFP positive cells is approximately 70%.

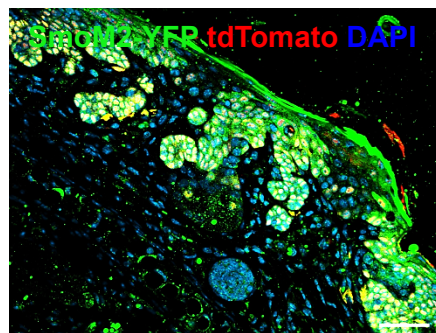
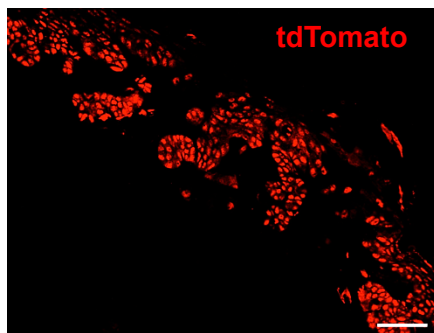
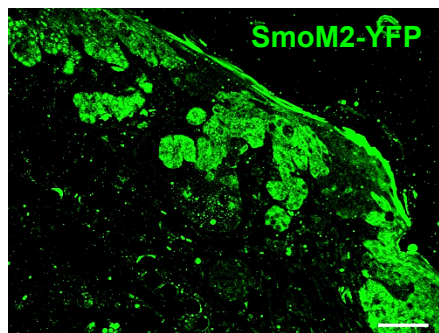
A

Yap^{fl/fl} R26^{SmoM2}YFP/+; Cyr61^{eGFP}

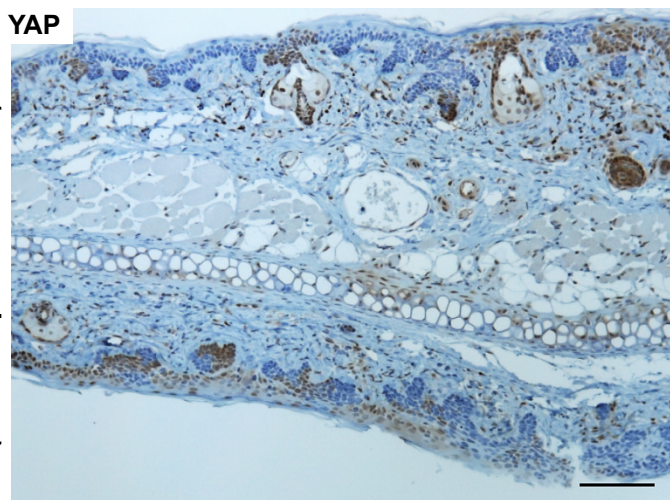




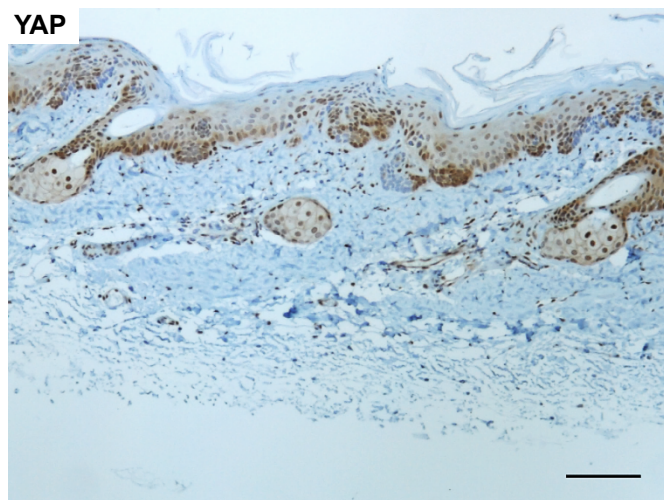
Appendix Figure S2

A*R26^{SmoM2YFP/tdTomato} K14CreER*
(6 weeks post tamoxifen)**B***Yap^{fl/fl}*
(6 weeks post tamoxifen)

Ear



Tail

**C***Yap^{fl/fl}*
(6 weeks post tamoxifen)