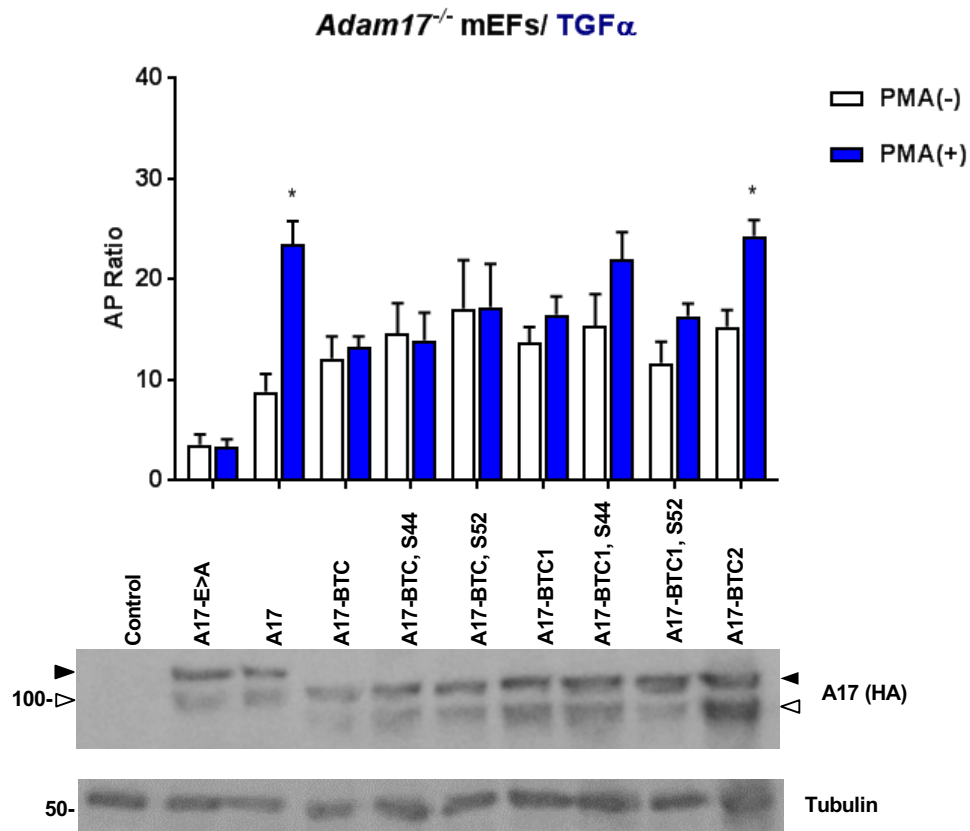


Suppl. Figure 4

| | Transmembrane | | | | | | | | | | | | | | | | | | | | |
|----------|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BTC | L | V | V | C | L | I | V | V | M | V | V | F | I | I | L | V | I | G | V | C | T |
| BTC-S44 | L | V | V | C | L | I | V | V | S | V | V | F | I | I | L | V | I | G | V | C | T |
| BTC-S52 | L | V | V | C | L | I | V | V | M | V | V | F | I | I | L | V | S | G | V | C | T |
| BTC1 | L | V | G | S | L | I | V | V | M | V | V | F | I | I | P | V | I | G | V | C | T |
| BTC1-S44 | L | V | G | S | L | I | V | V | S | V | V | F | I | I | P | V | I | G | V | C | T |
| BTC1-S52 | L | V | G | S | L | I | V | V | M | V | V | F | I | I | P | V | S | G | V | C | T |
| BTC2 | L | V | G | S | L | I | V | V | S | V | V | F | I | I | P | V | S | G | V | C | T |



Supplementary Figure 4. Test of how introduction of individual serine residues in the TMD of A17-BTC and A17-BTC1 affects the ability of these constructs to rescue constitutive and PMA-stimulated shedding of TGF α from A17^{-/-} mEFs. Point mutations were generated in A17-BTC or A17-BTC1 by adding individual Serine residues (S44, S52) into A17-BTC or A17-BTC1 (see table in top panel, Serine residues highlighted in green), and the resulting constructs were tested for their ability to rescue constitutive or PMA-stimulated TGF α shedding from *Adam17*^{-/-} mEFs (25 ng/ml PMA, 1 hour). The addition of either S44 or S52 into A17-BTC or A17-BTC1 did not significantly affect the constitutive or stimulated activity of these constructs compared to A17-BTC or A17-BTC1. Black arrowhead, pro-ADAM17; white arrowhead, mature ADAM17. All mutants were expressed at comparable levels, as assessed by Western Blot analysis. Results are presented as mean \pm SEM (n=3). *P \leq 0.05.