SUPPLEMENTARY INFORMATION:

Figure S1: Schematic overview of the HB-EGF and AREG lentivirus constructs used in this study. sHB-EGF and proHB-EGF denote soluble and transmembrane HB-EGF precursor, respectively.

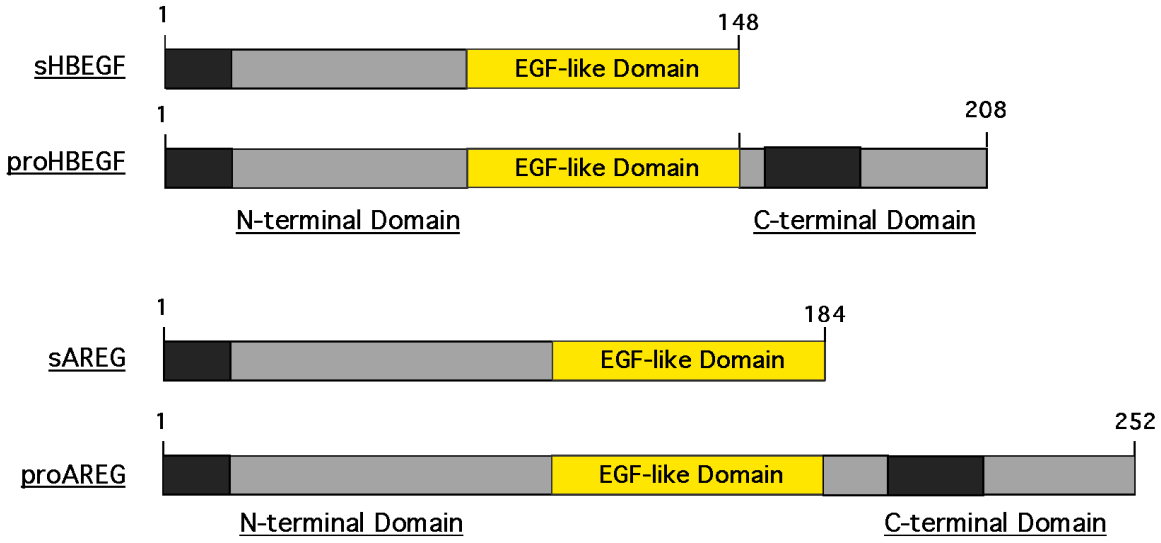


Figure S2: HB-EGF expression strongly changes KC morphology. N/TERT stably transduced with constitutive or inducible lentiviral constructs encoding the soluble or pro-forms of HB-EGF were cultured in KSFM as described in Material and Methods. Treatment with TET (1 µg/ml) was done for 24 h.

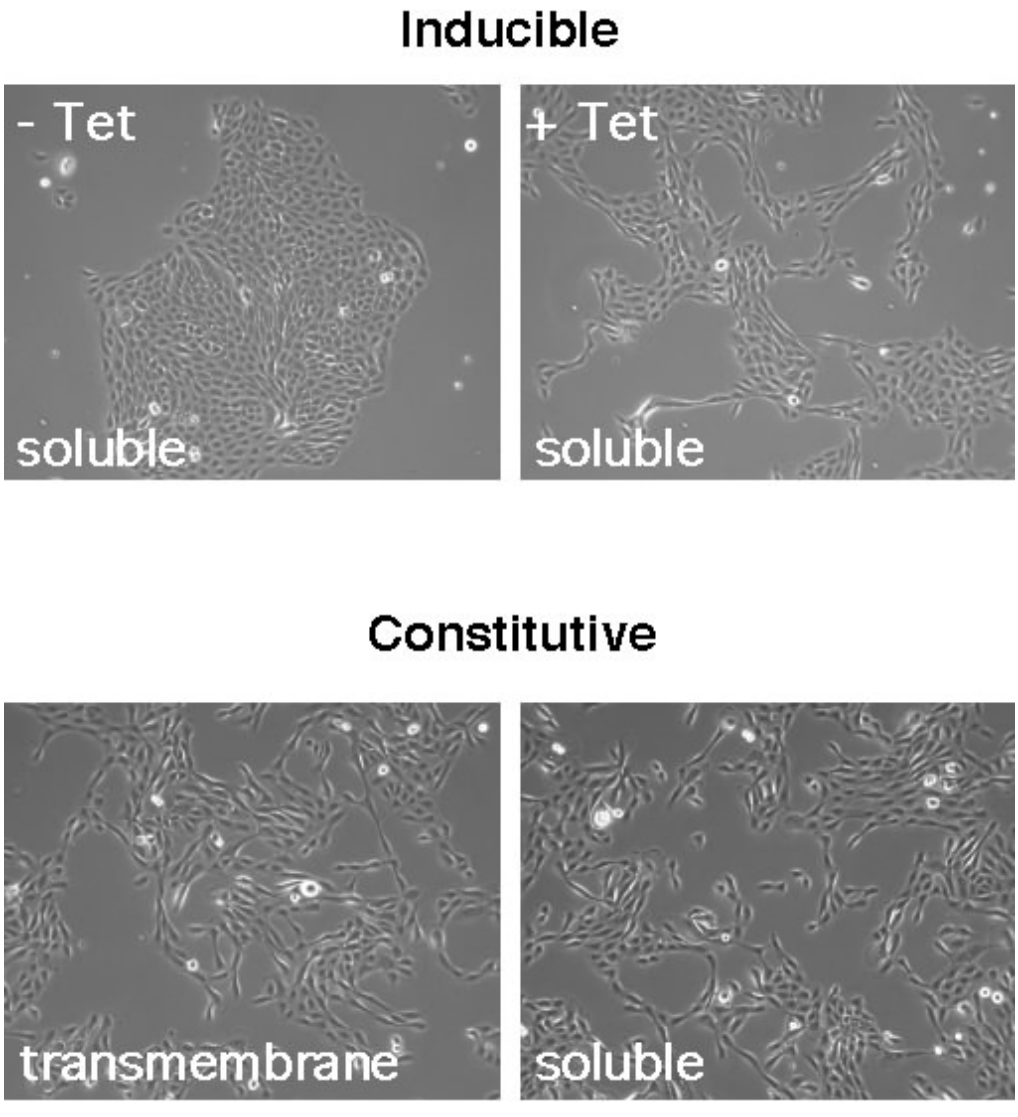


Figure S3: Transient infection of NHK with lentiviruses encoding sHB-EGF or sAREG.

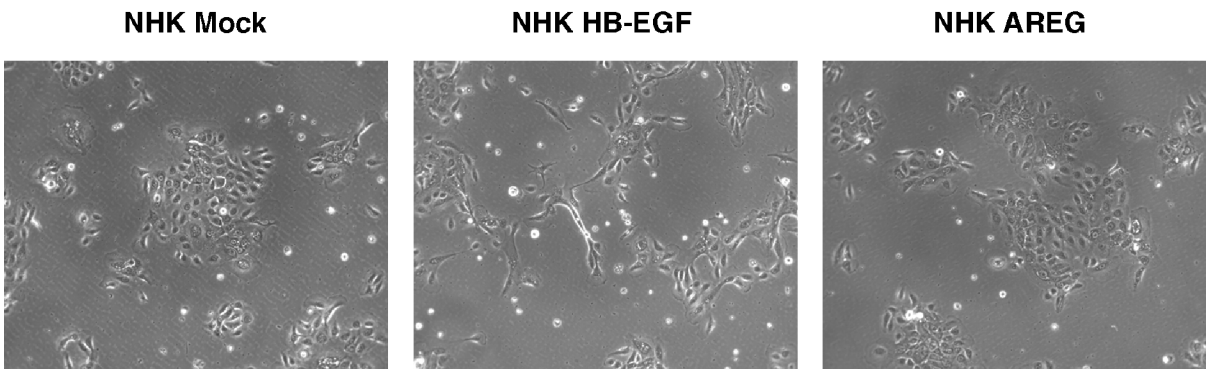


Figure S4: Six day growth assays with N/TERT-TR control cells incubated in the presence or absence of 1 μg/ml TET followed by crystal violet staining.

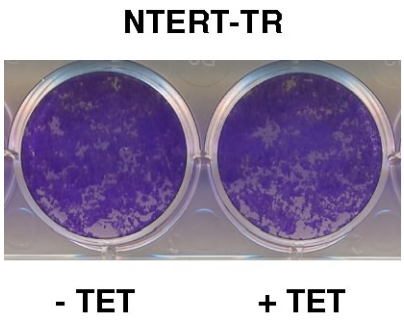
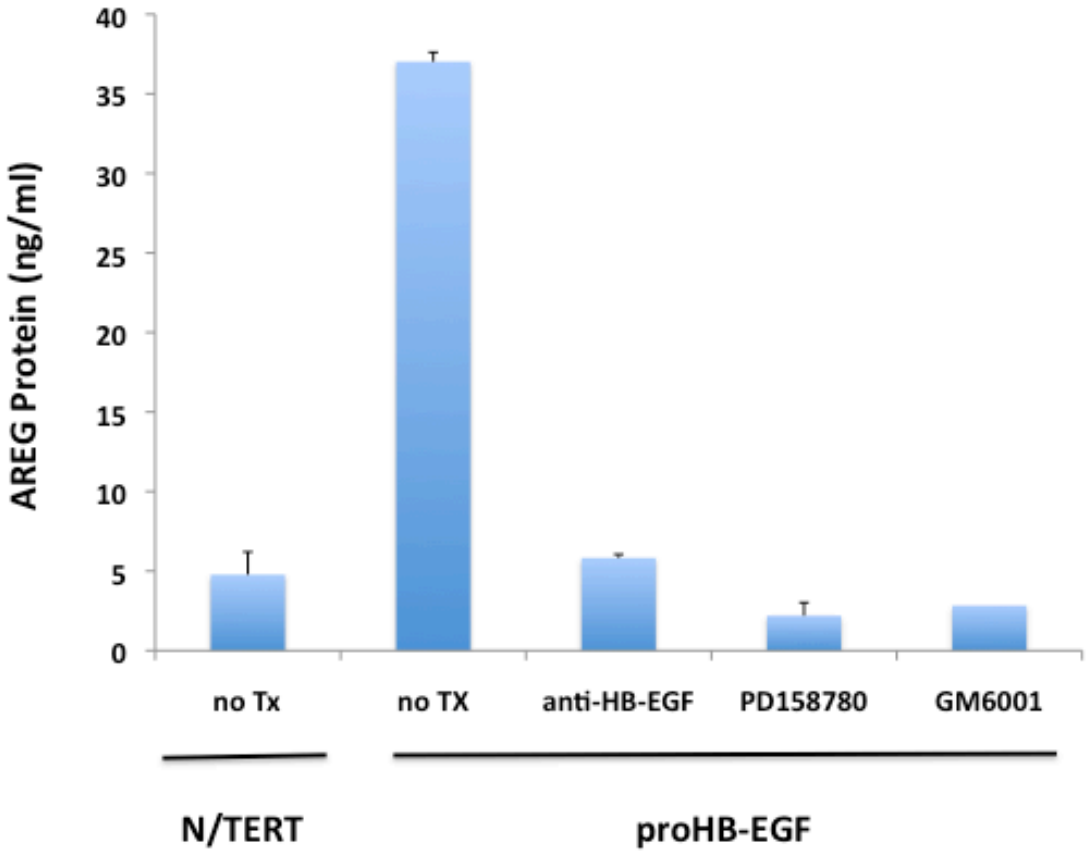


Figure S5: AREG shedding in N/TERT with and without constitutive expression of proHB-EGF. Subconfluent cultures of N/TERT with and without constitutive expression of proHB-EGF were incubated in the presence or absence of HB-EGF Ab (5 μg/ml), PD158780 (1 μM) or GM6001 (40 μM) for 24h and the conditioned medium was analyzed for shed AREG. Data are expressed as ng of soluble AREG per ml of supernatant (mean +/- SEM, n=3). The data for N/TERT have been previously shown (Stoll *et al.*, 2010) and are included here for comparison.



Video 1: N/TERT KCs

Video 2: N/TERT KCs with constitutive expression of AREG

Video 3: N/TERT KCs with constitutive expression of HB-EGF

References:

Stoll SW, Johnson JL, Li Y, Rittié L, Elder JT (2010) Amphiregulin carboxy-terminal domain is required for autocrine keratinocyte growth. *J Invest Dermatol* 130:2031-2040.