



Figure S2. Description and validation of BJ stepwise tumorigenesis system. a, The scheme illustrates expression pattern of co-regulated genes based on comparative transcriptomics of primary, immortalized and transformed cells. b, Statistics of changes of differentially expressed genes during cell transformation. c, RT-qPCR validation of exogenous (cMYC, TERT) and transformation-relevant (CCND2, THBS1) gene expression. d, Western blot analysis of whole cell extracts of BJ, BJEL and BJELM cells confirms overexpression of T antigen and MYC-ER at the immortalization and tumorigenic steps, respectively. e, Validation of acquisition of TRAIL sensitivity<sup>66</sup> during the transformation process. TRAIL-induced apoptosis was observed specifically in BJELM cells, while BJ and BJEL cells are showing resistance to TRAIL treatment. f, Reproducibility between replicates evaluated by calculation of Pearson correlation coefficient g, Reproducibility between replicates evaluated by calculation of skewness parameter between BJEL and BJELM replicates relative to BJ replicates.