

Missan et al., Fig. S1

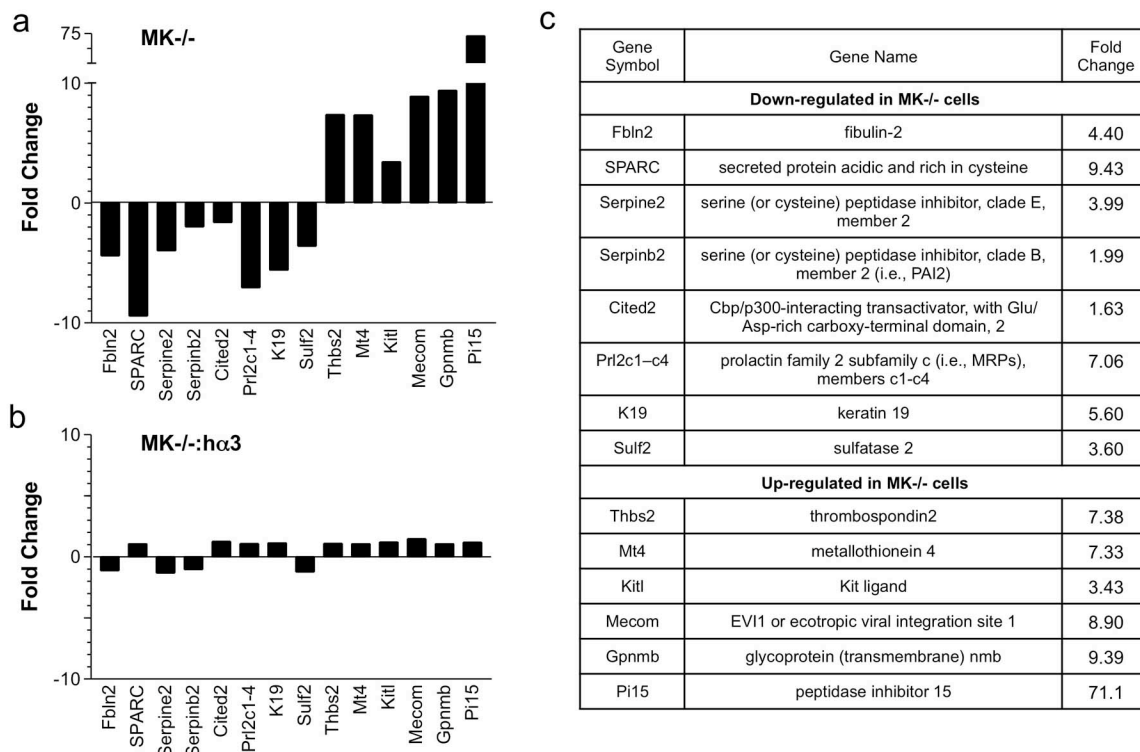


Figure S1. Microarray analysis reveals $\alpha 3\beta 1$ -dependent gene regulation in MK cells. RNA was isolated from MK cell cultures as described in the text and analyzed using the Affymetrix Mouse Exon 1.0 ST Array. Results for a subset of $\alpha 3\beta 1$ -regulated genes are shown; the full microarray data set is submitted to the Gene Expression Omnibus under series GSE42041 (a, b) Gene expression changes are depicted graphically as fold decrease (negative value) or increase (positive value) in (a) $\alpha 3$ -null cells (MK^{-/-}) or (b) MK^{-/-} cells rescued with human $\alpha 3$ (MK^{-/-}:h $\alpha 3$), each relative to wild type cells (MK^{+/+}). (c) Summary of genes that are down-regulated or up-regulated in MK^{-/-} cells compared to MK^{+/+} cells. Gene symbols used in (a) and (b) are indicated. Data are the average of two biological replicates for each cell line.

Missan et al., Fig. S2

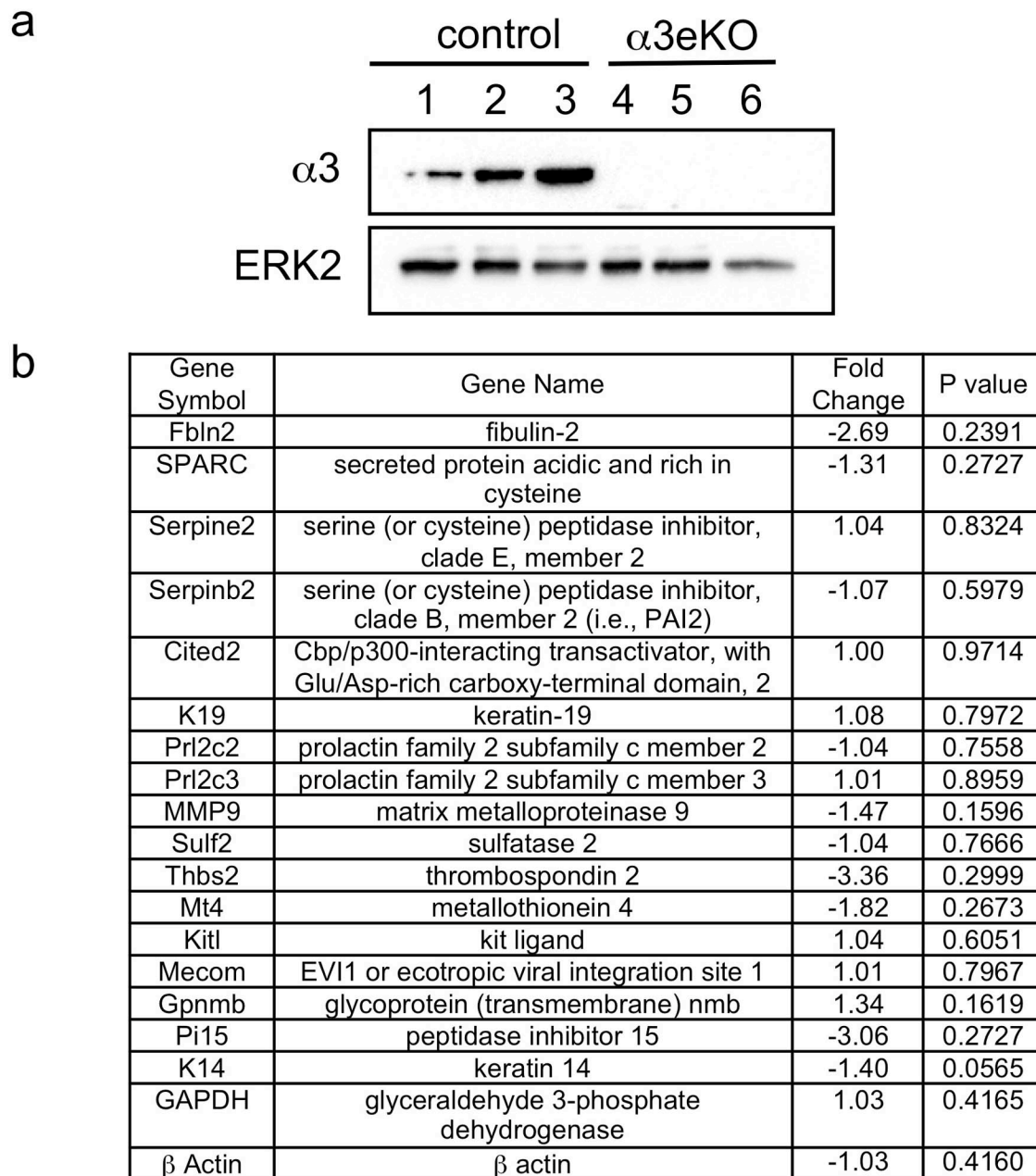


Figure S2. Analysis of gene expression in primary, neonatal keratinocytes isolated from control mice that express $\alpha3\beta1$ in epidermis (genotype $\alpha3flx/flx$), or from $\alpha3eKO$ mice that lack $\alpha3\beta1$ in epidermis (genotype $K14-Cre:\alpha3flx/flx$). (a) Western blots of lysates from control or $\alpha3eKO$ keratinocytes with anti- $\alpha3$ antiserum, or with anti-ERK2 as a control. (b) qPCR analysis was performed as in Figure 1. For each gene, the average fold change ($\alpha3eKO$ cells compared to control cells) was determined by analyses of primary cultures from three different animals for each genotype, shown in (a); p values are calculated based on Student's t-test of the replicate $2^{(-\Delta\Delta Ct)}$ values for each gene in the control group and treatment groups.

Missan et al., Fig. S3

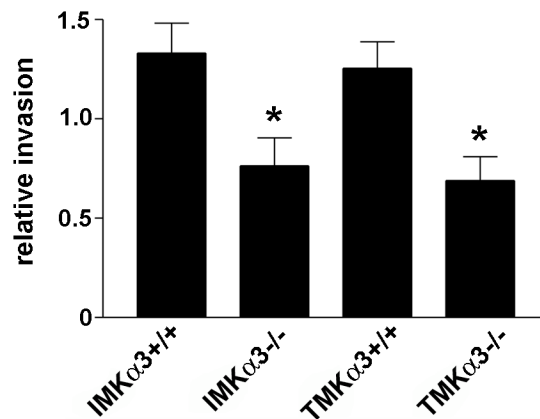


Figure S3. Absence of $\alpha3\beta1$ from p53-null immortalized IMK cells or RasV12-transformed TMK cells results in reduced invasion through Matrigel. Graph shows relative cell invasion \pm s.e.m., normalized to the daily mean to account for variability by day, for IMK $\alpha3^{+/+}$, IMK $\alpha3^{-/-}$, TMK $\alpha3^{+/+}$, or TMK $\alpha3^{-/-}$ cells; n=3 separate experiments, each performed in duplicate; 1-way ANOVA, $p < 0.05$, Tukey's multiple comparison.