

Supplementary Figure S1. PKC inhibition blocks calcium dependent DLX3, p21 and Filaggrin expression in keratinocytes and downregulates TPA-induced Protein Kinase Signaling and Cell Adhesion upregulation. (a) Bar graphs showing relative expression level of Flg and p21 in primary mouse keratinocytes. (b) Bar graphs showing relative expression level of DLX3 and p21 in normal human epidermal keratinocytes. (c) Bar graphs showing relative expression level of DLX3 after PKCδ and PKCε overexpression in proliferative (0.05mM Ca2+) or differentiating (0.12mM Ca2+) keratinocytes. For all graphs the results are shown as mean ± SD of three independent experiments. *P<0.05; ** P<0.01; ***P<0.001 (d) Bar graph showing GO term Biological Process enrichment by DAVID Functional Annotation tool in PKCα versus Scramble siRNA treated keratinocytes after TPA or DMSO (control) stimulus for 24 hours. (e) Heatmaps of differentially expressed mRNAs in PKCα versus Scramble siRNA treated keratinocytes after TPA or DMSO (control) stimulus for Protein Kinase Signaling (left) or Cell Adhesion (right) clusters. Expression values are colored based on their z-score after normalization across treatments.

Figure S1