Supplemental Figure 1. Concentration Dependent Effect of Vitamin D on LL-37 Expression in Primary HCEC. Primary HCEC were isolated from donor corneas and cultures were treated with $10^{-8} \text{M}$, $10^{-7} \text{M}$, or $2 \times 10^{-7} \text{M}$ 1,25D$_3$ for 24h. RNA was collected from cell lysates for qPCR analysis of LL-37 expression. Based on these data, $10^{-7} \text{M}$ 1,25D$_3$ was selected for all subsequent studies. Graph reflects data from one of two corneal donors and data are mean +/- SEM of triplicate values.
Supplemental Figure 2. Vitamin D upregulates DUSPs however no change is seen in TLR3-induced p38α phosphorylation. (A) DUSP1, 4, 5, and 10 expression in hTCEpi was evaluated with real-time PCR following 24h of treatment with 10^{-7}M 1,25D_3. Data represent the mean +/-SEM of 3 independent experiments and analysis was by Student’s t-test with
comparison to control, untreated cells; p<0.05. (B) hTCEpi were pretreated with $10^{-7}$M 1,25D$_3$ for 24h and stimulated with Poly(I:C) for the indicated times. Protein expression of phosphorylated p38α (T180/Y182) was measured in cell lysates by ELISA. Data represent the mean +/- SEM of 3 independent experiments. Statistical analysis was by ANOVA with Bonferroni’s test for multiple comparisons; p<*0.05, **0.01, ***0.001.