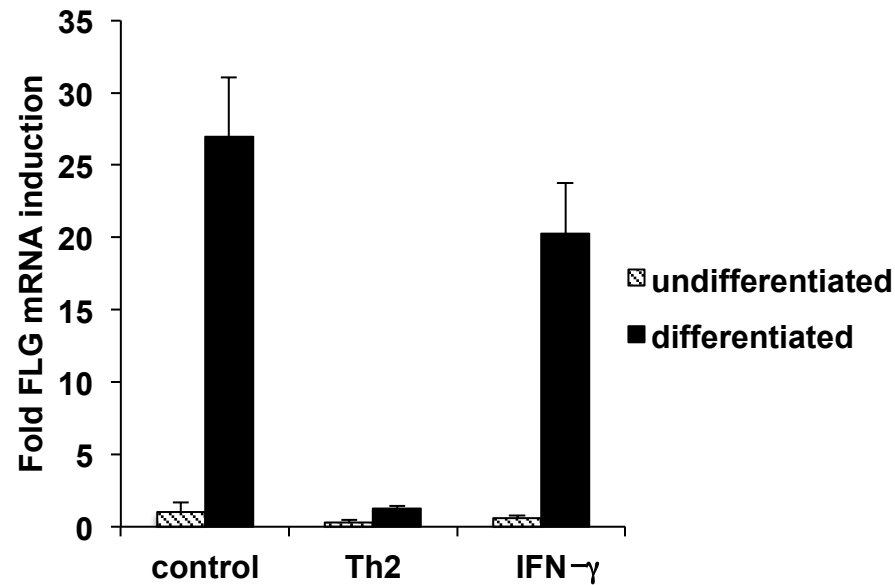
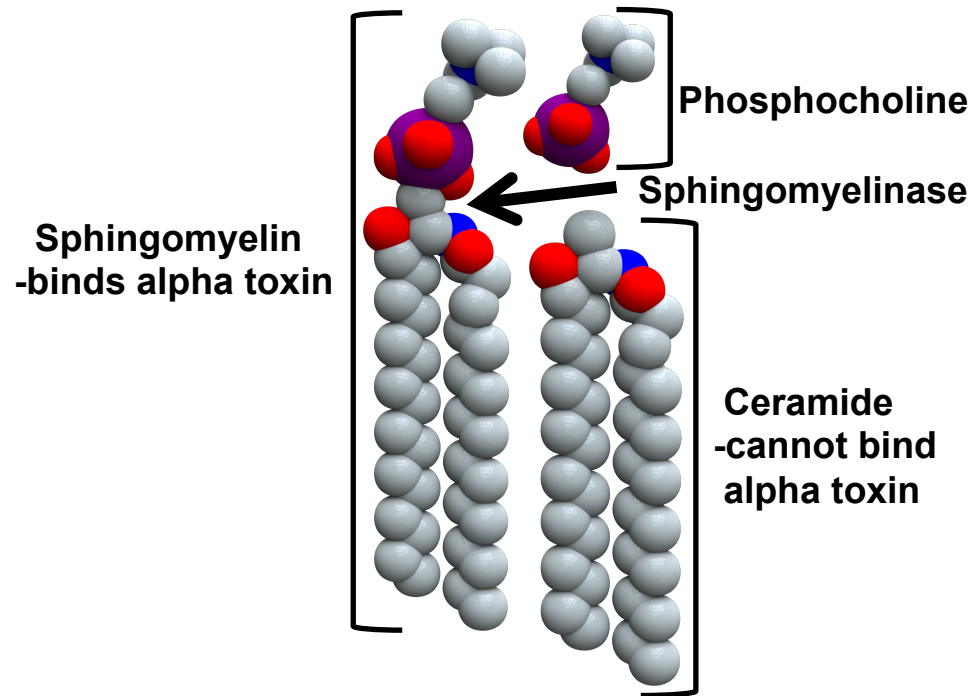


## Supplemental Fig. 1



**Filaggrin levels are reduced in Th2 cytokine treated cells.** Primary keratinocytes were treated with media, IL-4/13, or IFN- $\gamma$  for 24 hours. Cells were then harvested (undifferentiated) or treated with 1.3 mM calcium (differentiated) for 5 additional days. Filaggrin (FLG) mRNA was measured by RT-PCR and normalized to actin.

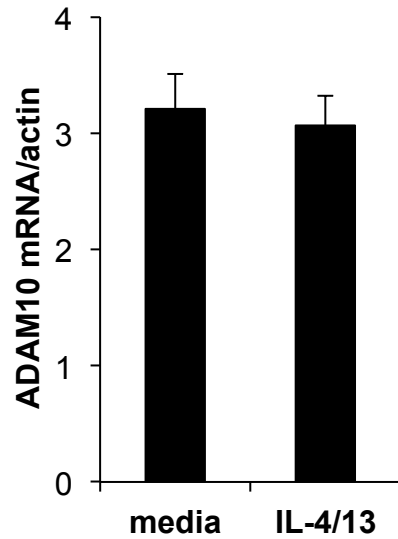
Supplemental Fig. 2



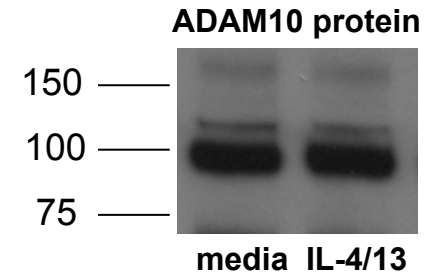
**Space filling model.** Sphingomyelin (which binds alpha toxin) can be cleaved by sphingomyelinase to generate ceramide (which cannot bind alpha toxin) and free phosphocholine.

## Supplemental 3

A



B



**ADAM10 expression is unchanged by Th2 cytokines (A)** Keratinocytes were differentiated for 5 days in the presence or absence of IL-4/13 (n = 3). ADAM10 mRNA was measured by RT-PCR and normalized to actin. **(B)** Protein levels were measured by Western blot.