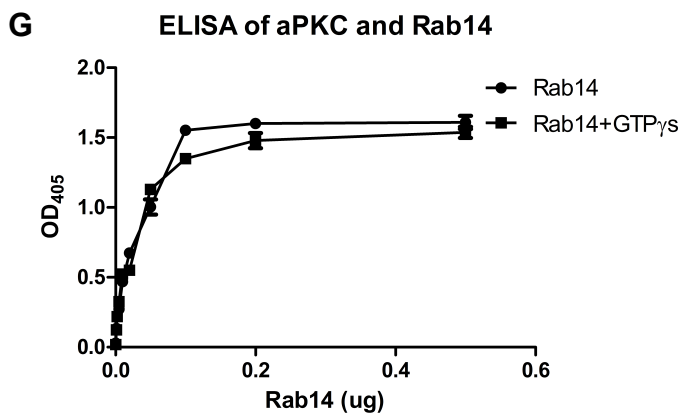
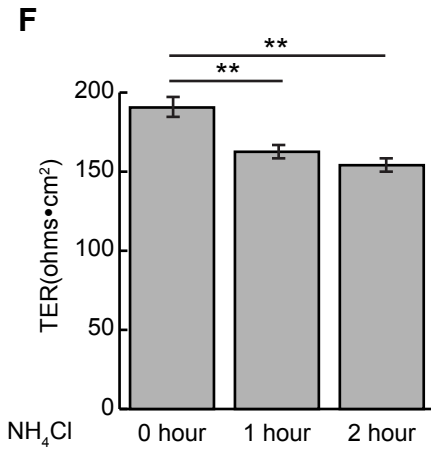
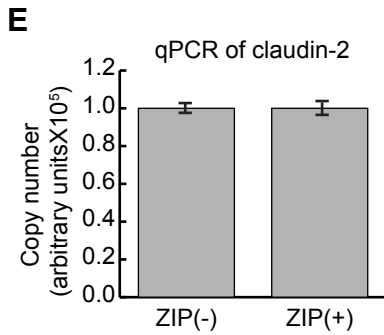
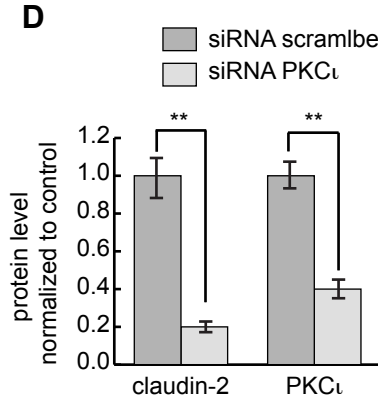
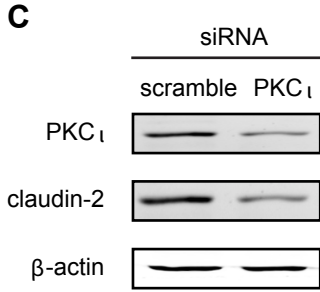
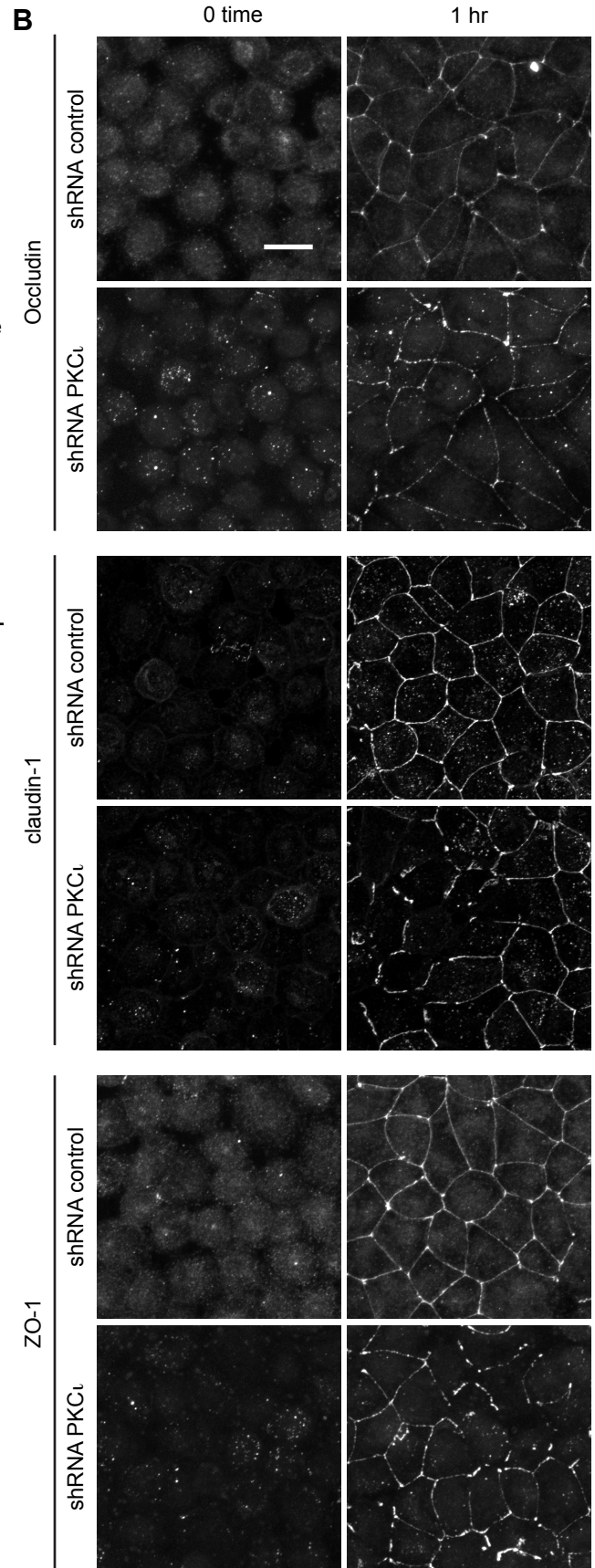
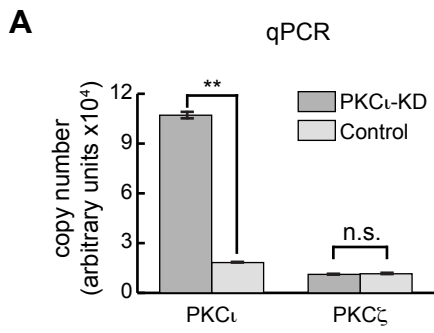


Supplemental Materials

Molecular Biology of the Cell

Lu et al.



Supplemental Figure 1 A. shRNA-PKC ι reduces PKC ι mRNA levels but does not impact PKC ζ mRNA. qPCR shows that PKC ι mRNA level is reduced in PKC ι knockdown cells compared to control. However, the mRNA level of PKC ζ does not change. In addition, PKC ι is expressed at more than ten-fold higher levels than PKC ζ , no significant difference. B. PKC ι reduction delays the reassembly of tight junctions after calcium switch. Occludin, claudin-1 and ZO-1 labeling was assessed after calcium switch. These proteins are targeted to the junctions more slowly in PKC ι -KD cells. Scale bar, 10 μ m. C. MDCK cells were transfected with siRNA against PKC ι or scrambled siRNA and blotted for indicated proteins. β -actin was used as loading control. D. Quantification of protein levels in image. Graph represents the 3 repeats of the siRNA knockdown experiments and SEM was obtained from three replicates loading in each experiment. $**p < 0.001$. E. ZIP treatment does not impact message levels for claudin-2. F. Incubation of PKC ι knockdown cells with NH $_4$ Cl complements some of the increase in TER. $**p < 0.001$. G. Interaction of PKC ι and Rab14 *in vitro* is GTP independent. Pre-incubation of Rab14 with GTP γ S does not change the affinity of the PKC ι and Rab14 interaction.