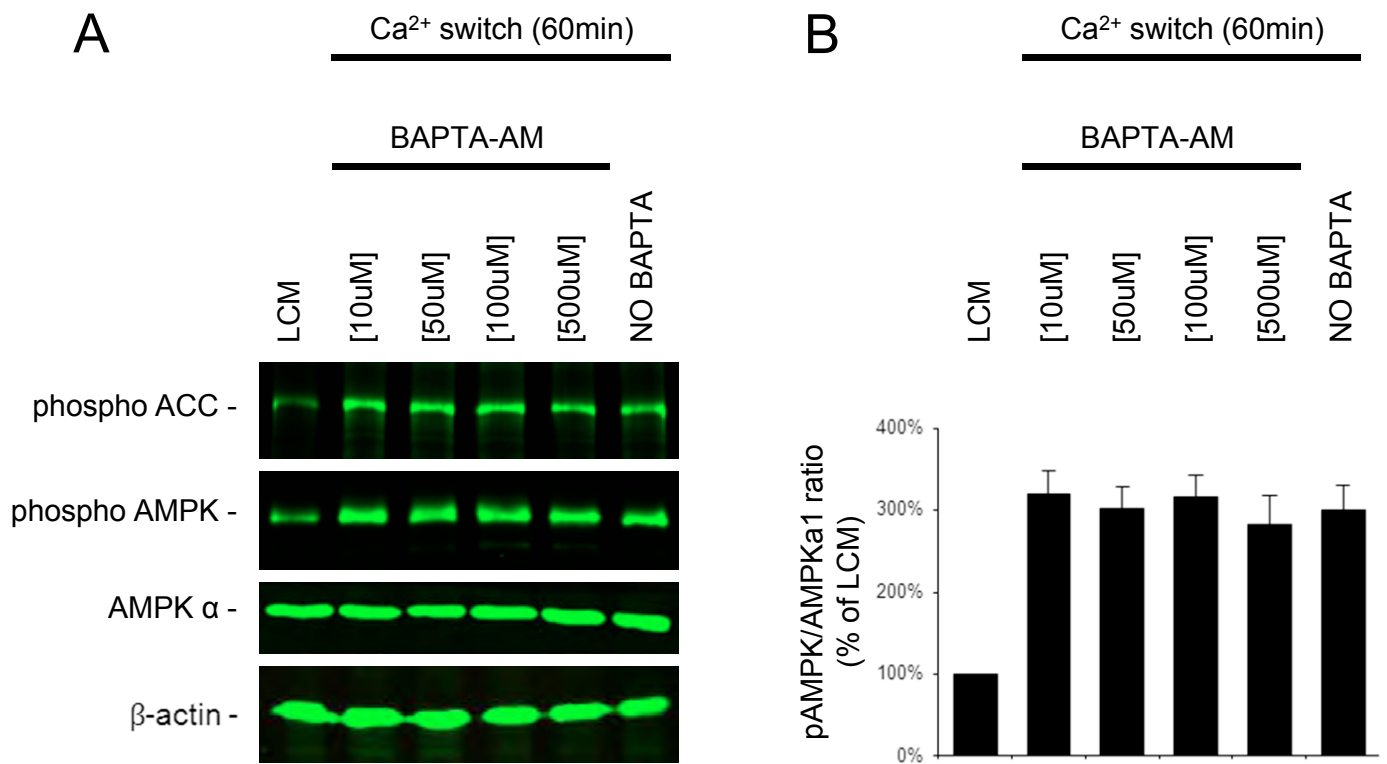


**Fig. S1. Deposition of occludin at the plasma membrane following activation of the CaSR in MDCK cells.** *A*, Confluent MDCK cells were incubated in low- $\text{Ca}^{2+}$  medium (LCM) for 16 h, exposed to fresh LCM supplemented with DMSO or with the CaSR agonists neomycin [1 mM] or  $\text{Gd}^{3+}$  [100  $\mu\text{M}$ ] for the indicated time points, fixed in ice-cold methanol, and immunostained for occludin. *Bar*, 50  $\mu\text{m}$ . *B*, quantification of occludin relocation to the cell membrane in *A*. Data represent means  $\pm$  S.D., and are representative of three independent experiments. The length of occludin per cell is measured within each of 6 randomly picked fields of view. The asterisks denote significant difference versus incubation with DMSO by Student's *t* test ( $P \leq 0.05$ ).



**Fig. S2. Pre-exposure to BAPTA-AM does not abrogate AMPK phosphorylation and activation in MDCK cells following  $\text{Ca}^{2+}$  switch.** *A*, Confluent MDCK cells were incubated in low- $\text{Ca}^{2+}$  medium (LCM) for 16 h, incubated with fresh LCM supplemented with increasing concentrations of BAPTA-AM [from 10 to 500  $\mu\text{M}$ ] for 30 minutes, exposed to high- $\text{Ca}^{2+}$  medium (HCM) for 60 minutes, lysed in the presence of protease and phosphatase inhibitors, and probed with the indicated antibodies in a Western blot analysis. *B*, The quantification of the immunoreactive signal for phospho-AMPK was performed using the Odyssey Infrared Scanner (Li-Cor Biosciences) after normalization to the AMPK $\alpha$ 1 expression level. Data represent mean percentages  $\pm$  s.d. from 3 independent experiments, with the LCM level used as reference level (100%).