

Aldosterone maintains acid–base balance and  $K^+$  homeostasis by controlling  $H^+$  and  $K^+$  secretion in renal epithelial cells. This supports the hypothesis that intracellular  $H^+$  activity, regulated by the  $Na^+/H^+$  exchanger, serves as the signal to couple aldosterone–induced  $K^+$  secretory flux to  $H^+$  secretion in renal tubules. Since  $H^+$  secretory fluxes are paralleled by  $K^+$  secretion, it was postulated that the hormone–induced increase of intracellular pH activates the lumenally located  $K^+$  channels