SIGNIFICANCE STATEMENT

Emerging evidence indicates that, after AKI, de-differentiation, migration, and proliferation of surviving renal proximal tubule epithelial cells are responsible for tubular regeneration and that EGF receptor (EGFR) expression and activation are important for that process. In this study, the authors provide pharmacologic and genetic *in vivo* and *in vitro* evidence that activation of the EGFR-Akt signaling pathway mediates expression and activation of Yes-associated protein (YAP). YAP, a downstream effector of the Hippo signaling pathway, regulates cell cycle progression and cell migration, processes that are essential for epithelial cell regeneration during kidney recovery from AKI. This finding, therefore, suggests that the Hippo pathway or YAP activation may serve as a potential target for treatment of AKI.