Supplementary Data

Title: The interaction of S100A16 and GRP78 actives endoplasmic reticulum stress mediated through the IRE1α/XBP1 pathway in renal tubulointerstitial fibrosis

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Figure S1. **a.** The mRNA levels of S100A16 and GRP78 determined by real-time PCR in HK-2 cells treated with TGF-β1. **b.** The expressions of S100A16 and GRP78 were higher in S100A16^{Tg} kidneys than in wildtype kidneys. Immunohistochemical staining of S100A16 and GRP78 in the sham, S100A16^{Tg} (sham), kidney-obstructed UUO, and S100A16^{Tg} (kidney-obstructed UUO) mice. Scale bar =100 μm. **c.** Overexpression of S100A16 increased the protein expression levels of p-PERK/PERK, ATF6, and CHOP.

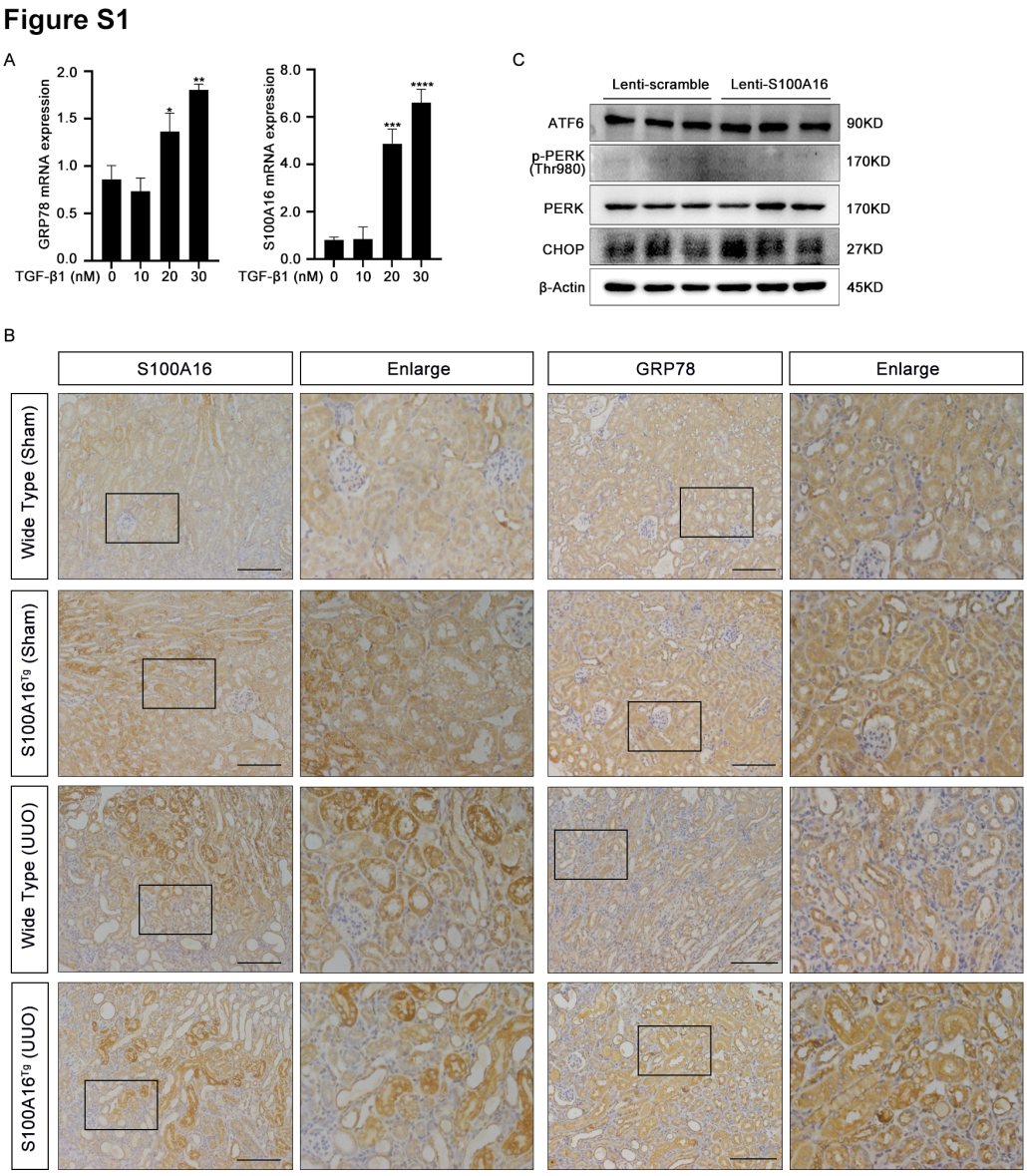

Figure S2. **a.** Intracellular calcium concentrations determined with fluorescent the Ca^{2+} indicator probe Rhod-2 AM in normal and S100A16 overexpressing HK-2 cells treated with BAPTA-AM (10 μM). *P < 0.05, **P < 0.01, ***P < 0.001. **b.** The mRNA levels of S100A16 and GRP78 determined by real-time PCR after BAPTA-AM treatment of Lenti-scramble and S100A16 overexpressing HK-2 cells.

Figure S2