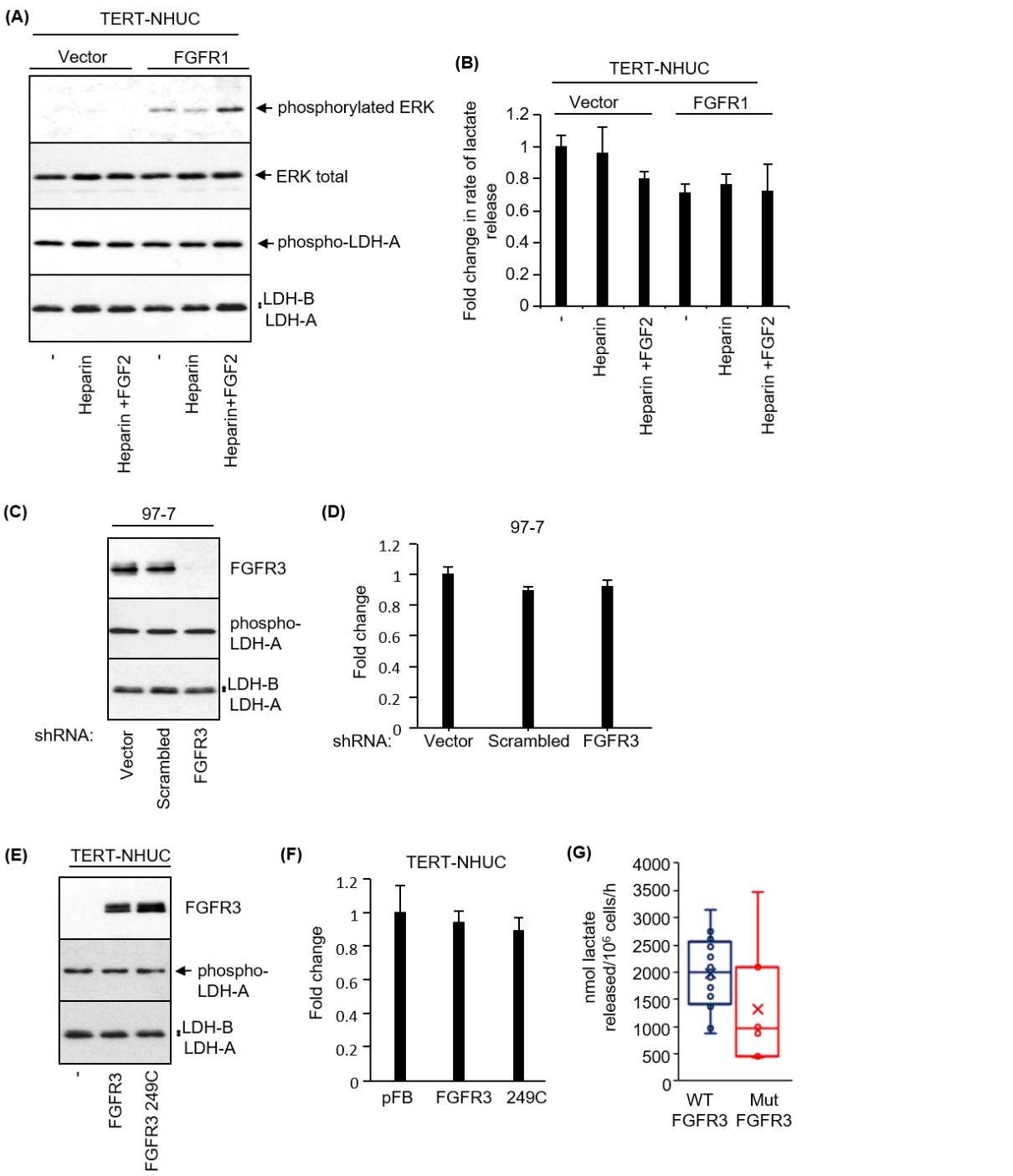

Figure S1. Effect of FGFR1 and FGFR3 expression on LDH-A Y10 phosphorylation and cellular lactate release.

A, Immortalised normal human urothelial cells (TERT-NHUC) stably transfected with FGFR1 expression vector were treated with FGF2 and heparin to induce FGFR1 signalling; as indicated by increased phosphorylated ERK. Effects on phosphorylated Y10 LDH-A levels are shown.

B, Effect of FGFR1 signalling on the rate of cellular lactate release in TERT-NHUCs. TERT-NHUC cells stably transfected with FGFR1 expression vector or control vector were treated with FGF2+heparin as in (A) and rates of cellular lactate release determined. Fold changes in rate of cellular lactate release relative to empty vector control cells are indicated. Mean ± SD of three independent determinations.

C, Representative immunoblots showing FGFR3 protein knock-down by FGFR3 shRNA in 97-7 bladder cancer cells and effects on LDH-A and LDH-B protein levels and LDH-A Y10 phosphorylation levels.

D, Effect of FGFR3 protein knock-down by FGFR3 shRNA on rates of cellular lactate release in 97-7 bladder cancer cells. Fold changes in rate of cellular lactate release relative to shRNA vector control cells are indicated. Mean ± SD of three independent determinations.

E, Representative immunoblots showing the effect of overexpressing FGFR3 or the FGFR3 S249C activating mutant on LDH-A and LDH-B expression and phosphorylated LDH-A (Y10) in immortalised normal human urothelial cells (TERT-NHUCs).

F, Effect of overexpressing FGFR3 or FGFR3 S249C activating mutant on rates of lactate release in TERT-NHUCs. Fold changes in rate of cellular lactate release relative to pFB vector control cells are indicated. Mean ± SD of three independent determinations.

G, Box plot showing the mean rates of cellular lactate release by the panel of bladder cancer cell lines (Fig.1A) following cell line clustering by FGFR3 mutational status.