



Supplemental figure legends

Supplemental Fig. 1. Treatment with dTAT plus glucose and calcium or glucose and calcium without dTAT showed no adverse effect on the cell viability of LLC, A549, or BEAS-2B cells after 1, 3, or 5 days post treatment. In this study, cells were seeded in 96 well plates 24h prior to treatment with 1.86 or 3.72 μg/mL of dTAT per well. Cell viability was determined by MTT assay 1, 3, and 5days after the treatment. CNT, control, no additional chemicals; Glu Low; 0.03 % glucose and 0.56 mM CaCl<sub>2</sub> solution; Glu High, 0.06 % glucose and 1.1 mM CaCl<sub>2</sub> solution; dTAT Low, 1.86 μg/mL dTAT in 0.03% glucose and 0.56 mM CaCl<sub>2</sub> solution; dTAT High; 3.72 μg/mL dTAT in 0.06% glucose and 1.1 mM CaCl<sub>2</sub> solution. These values are the final concentrations of the added chemicals in the incubation medium. Each data point indicates the average of triplicate determinations.

**Supplemental Fig. 2.** Incubation of LLC cells with solution containing glucose, NaCl, or KCl but neither dTAT or pDNA had no adverse effect on cell viability. In this study, 700 LLC cells were seeded in the 96 well plate one day prior to the treatment with 0.03 % (Low) or 0.06 % (High) of glucose or 1.75mM (Low) or 3.5 mM (High) of NaCl or KCl per well, respectively. Solutions designated as Low or High contain 0.56 mM or 1.1 mM CaCl<sub>2</sub>, respectively. These are the final concentrations of the additional chemicals in the incubation medium. Two days after the treatment, cell viability was determined by MTT assay. Bar graphs indicate the average of two independent triplicate determinations. CNT is the control that contains serum-free culture medium alone.