

Supplementary Information

Dual-Target Compounds against Type 2 *Diabetes Mellitus*: Proof of Concept for Sodium Dependent Glucose Transporter (SGLT) and Glycogen Phosphorylase (GP) Inhibitors

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Full Western blot pictures

Representative dose-response curves for calculating IC₅₀ values.

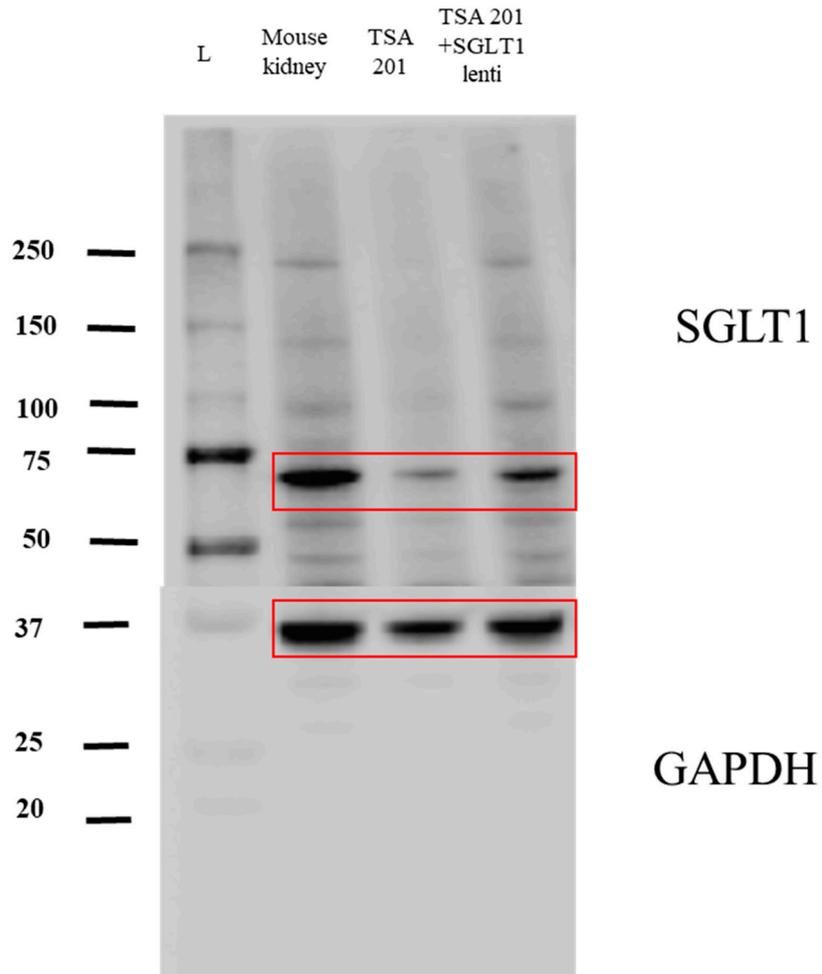


Figure S1. Western blot analysis of SGLT1 and GAPDH protein in TSA, transfected TSA201 cells, and mouse kidney. The membrane was incubated with anti-SGLT1 (Origene anti-SLC5A1 TA324226) or anti-GAPDH (EMD Millipore, ABS16) antibodies in 1% BSA solution. Super Signal West Femto and Pico Maximum Sensitivity Substrates (Sigma-Aldrich) were used to detect antibody binding. These are full blot images. GAPDH was used to normalize for protein loading. The results were quantified by BIORAD Image Lab 5.2.1 software. Protein load: 20 mg/lane. L, Molecular Weight Protein Ladder.

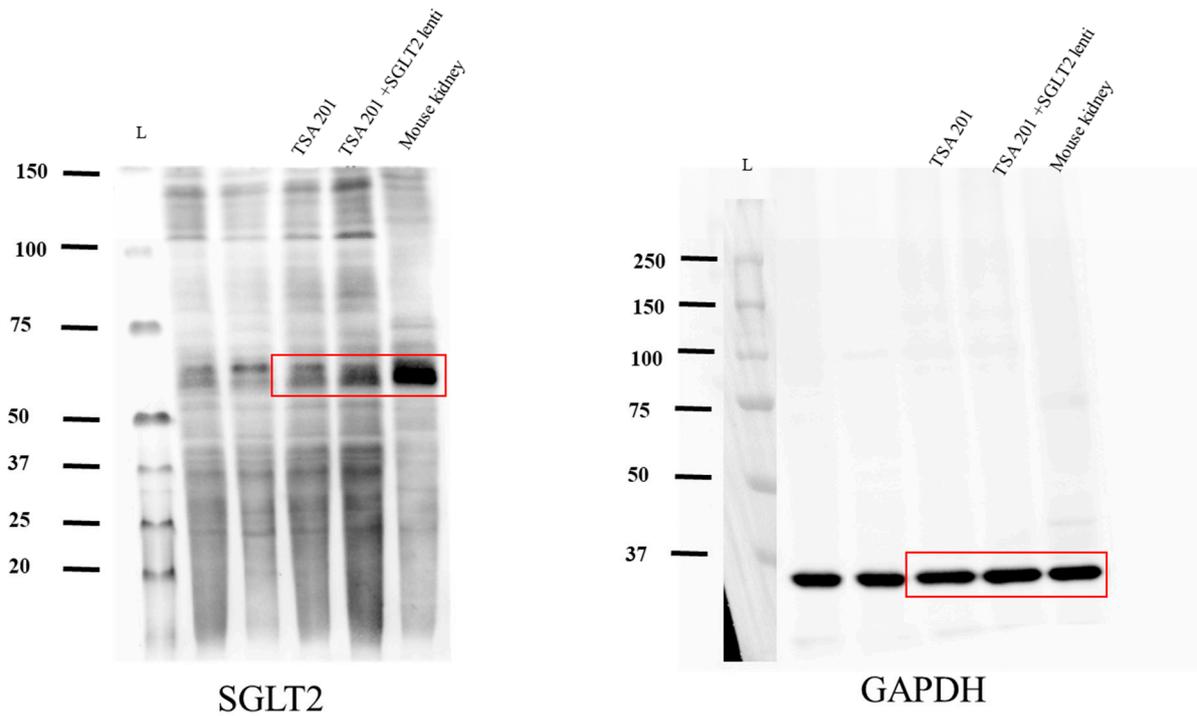


Figure S2. Western blot analysis of SGLT2 and GAPDH protein in TSA, transfected TSA201 cells, and mouse kidney. The membranes were incubated with anti-SGLT2 (Abcam, ab137207) or anti-GAPDH (EMD Millipore, ABS16) antibodies in 1% BSA solution. Super Signal West Femto and Pico Maximum Sensitivity Substrates (Sigma-Aldrich) were used to detect antibody binding. These are full blot images. GAPDH was used to normalize for protein loading. The results were quantified by BIORAD Image Lab 5.2.1 software. Protein load: 20 mg/lane. L, Molecular Weight Protein Ladder.

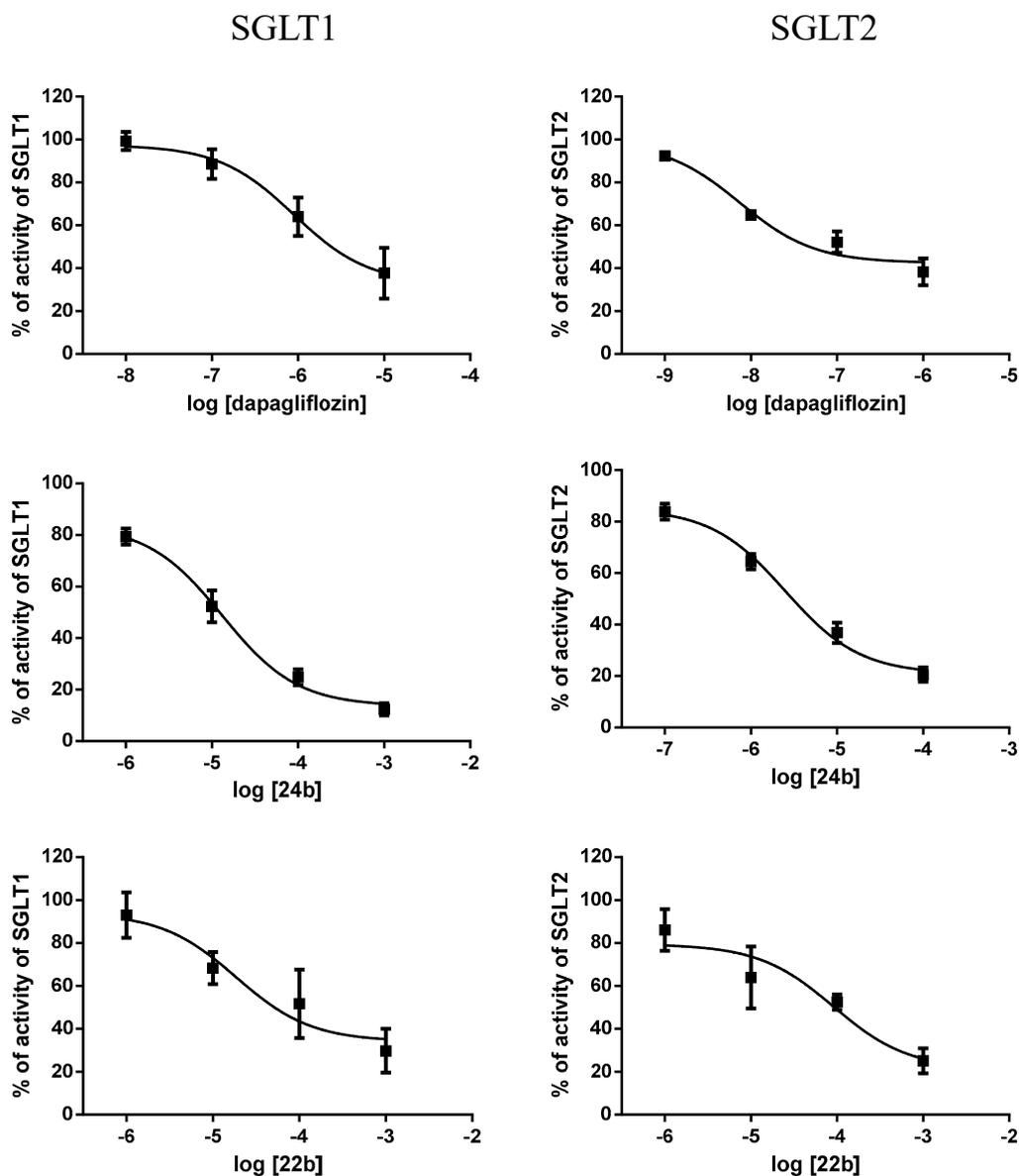


Figure S3. Representative dose-response curves for calculating IC_{50} values of dapagliflozin, compound **24b**, and compound **22b** for the inhibition of SGLT1 and 2. All calculations were prepared using the GraphPad Prism software. The data were plotted on a logarithmic scale as a function of inhibitor concentration. The IC_{50} values were calculated using non-linear regression analysis from the sigmoidal dose-response curves. Each experiment was repeated a minimum of three times.