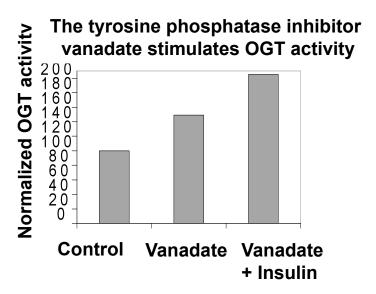
## Supplemental Figures

Supplemental Figure 1. 3T3-L1 cells were treated with sodium vanadate for 15 minutes before stimulated with -/+ 100nM insulin and OGT activity measured as mentioned in figure 4.

Supplemental Figure 2. NIH-3T3 fibroblasts overexpressing the insulin receptor were treated with -/+ 100nM insulin, fractionated into cytoplasmic and nuclear fractions, electrophoresed on 10% SDS-PAGE, and Western blotted with OGT (AL28) antibody and  $\alpha$ -tubulin to evaluate purity.

Cell fractionation. Cells were lysed in low salt buffer (20mM Hepes 7.5, 1mM EDTA, 1mM EGTA, 20mM NaF, 1mM DTT, 0.5mM PMSF), incubate for 1min, spin at 14,000 x g, wash 3x, and supernantant kept as cytoplamic fraction. Dissolve the pellet containing the nuclear fraction in high salt buffer (20mM Hepes 7.5, 420mM NaCl, 1mM EDTA, 1mM EGTA, 20mM NaF, 1mM DTT, 0.5mM PMSF, 20% Glycerol), incubate at 4°C for 30min with rocking, centrifuge for 20min at 14,000 x g and keep supernantant.

## **Supplemental figure 1**



## **Supplemental figure 2.**

