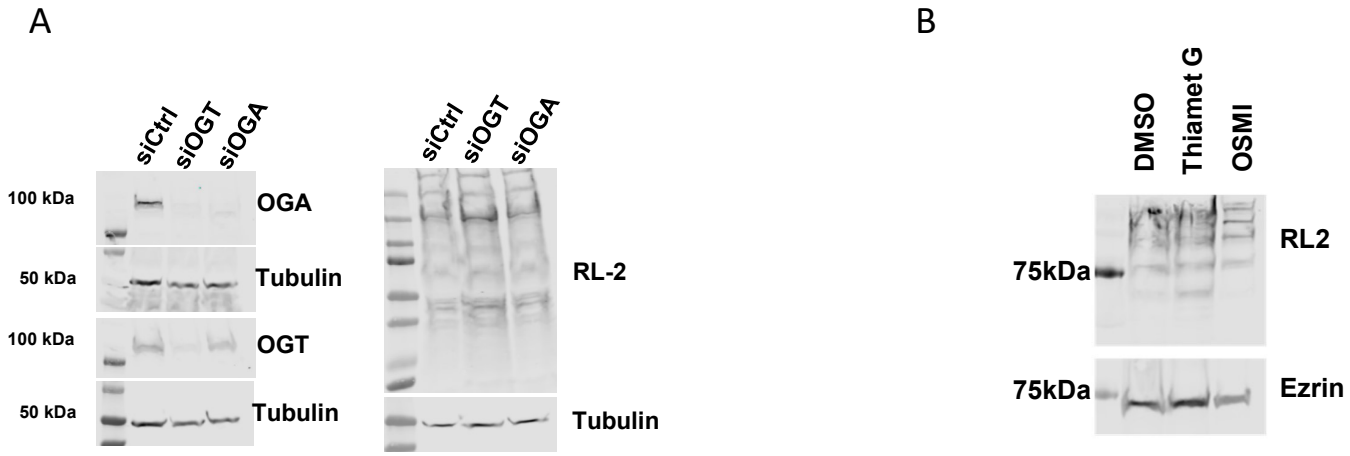

Supplementary Figure 2: Hela cells were transfected with siRNA to knockdown either OGA (red) or OGT (blue). Western blotting shows that knocking down OGT or OGA using siRNA transfection leads to decreased OGA levels (OGA knockdown) or a decrease in both OGA and OGT levels (OGT knock down) in both cases there was an increase in *O*-GlcNAcylation observed (RL-2 binding across the whole lane) (**A**). Cells were incubated for 72h with chemical inhibitors for OGT (OSMI-1, blue) and OGA (Thiamet G, red). Western blotting shows that inhibiting OGT and OGA using OSMI-1 and Thiamet G over a 3-day incubation respectively resulted in a decrease in *O*-GlcNAcylation observed (RL-2 binding across the whole lane) for OSMI-1 treatment and an increase in *O*-GlcNAcylation observed (RL-2 binding across the whole lane) for Thiamet G treatment (**B**).