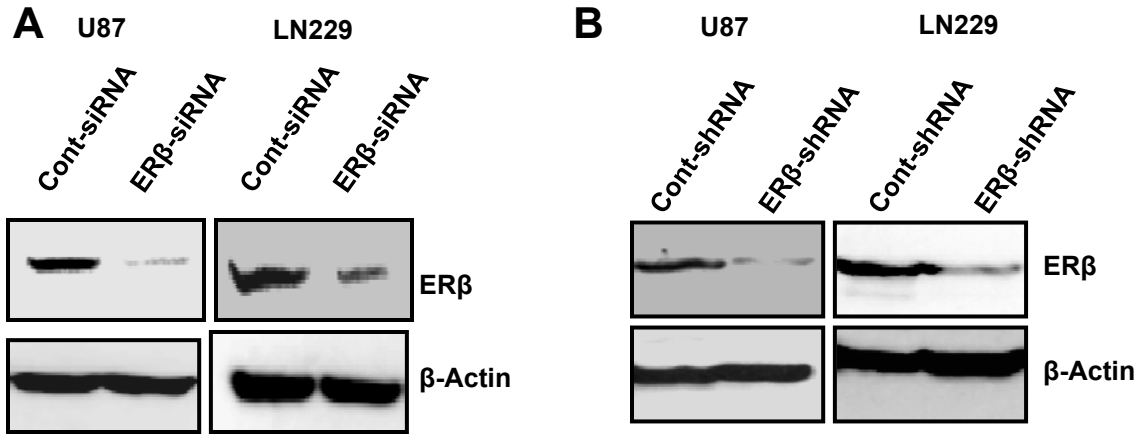
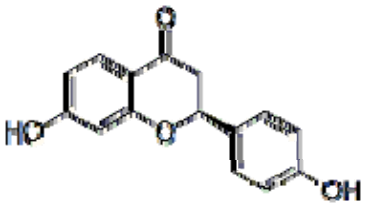
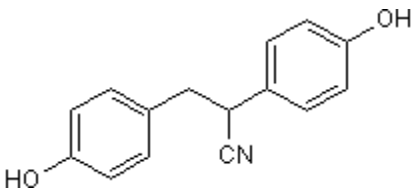


Supplementary Figure 1: Specificity of ERβ antibody. (A) U87 and LN229 model cells were transfected with either control or ERβ specific siRNA (cat# *L-003402-00-0005, ON-TARGETplus SMARTpool, Fisher Scientific*) and ERβ expression was analyzed after 72 h. (B) U87 and LN229 model cells were transfected with control or ERβ specific shRNA (cat# TRCN0000003325, Sigma) and ERβ expression was analyzed after 72 h.



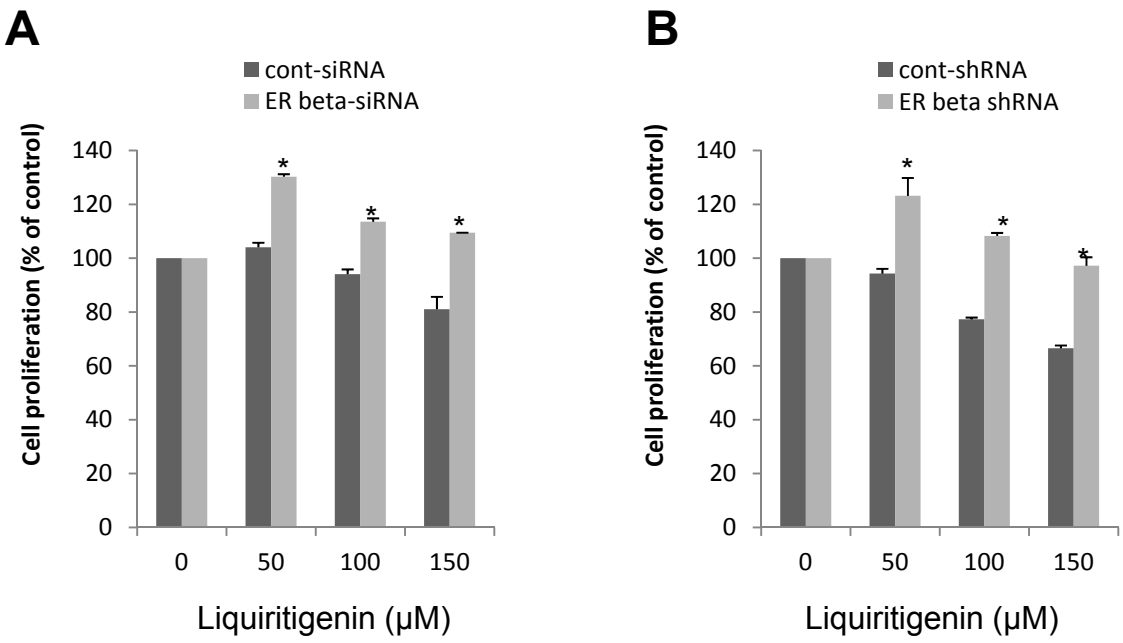
LIQUIRITIGENIN



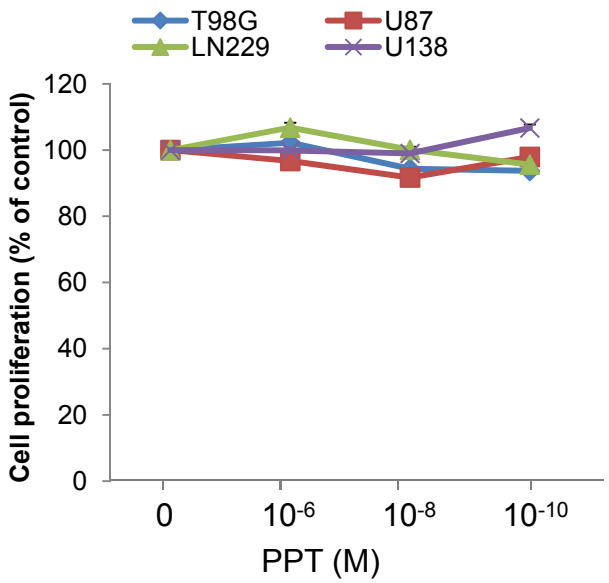
DPN

(2,3-*bis*(4-Hydroxyphenyl)-propionitrile)

Supplementary Figure S2: Schematic representation of structures of ERβ agonists that are used in this study



Supplementary Figure 3: ERβ knock down reduces the growth inhibitory effects of liquiritigenin. U87 glioma model cells were transfected with ERβ siRNA (**A**) and ERβ shRNA (**B**) respectively. Transfection of non-specific siRNA and shRNAs was used as control. After 48h of trasnfection, cells were treated with indicated doses of liquiritigenin and after 72 h proliferation was measured using MTT assay. Results showed that ERβ knockdown reduced liquiritigenin growth inhibitory effects. Further, increased proliferation seen in ERβ knockdown also supports its tumor suppressive role in glioma cells.



Supplementary Figure 4. ERα agonist propyl-pyrazole triol (PPT) has no effect on the proliferation of glioma cells. T98G, U87, LN229, and U138 glioma cells were treated with vehicle (0.1% DMSO) or indicated concentrations of PPT for 72 h, and proliferation was measured using MTT Assay.