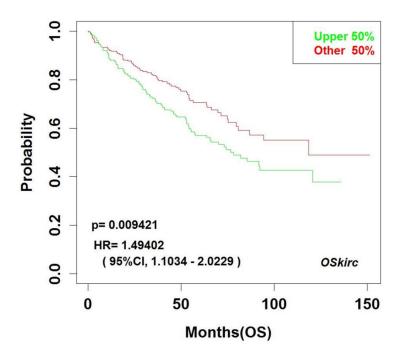
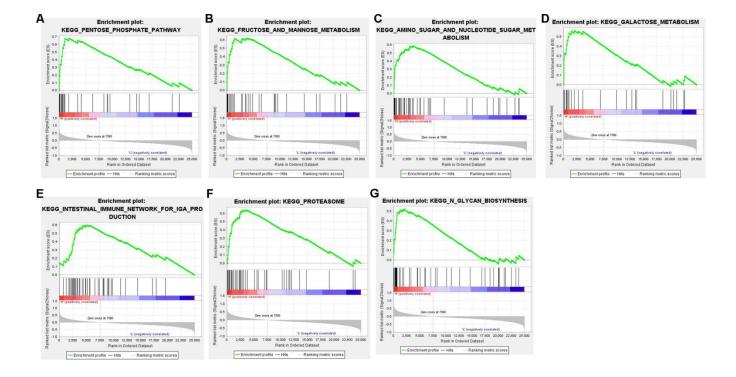
## **SUPPLEMENTARY FIGURES**



Supplementary Figure 1. Kaplan-Meier survival analyses on differential P4HB expression groups with OS in the included 532 KIRC patients. The patients were stratified into high and low P4HB groups by median (50% upper vs 50% lower). Compared with low mRNA expression of P4HB, high P4HB expressions were significantly correlated with poor OS (p < 0.0001);



**Supplementary Figure 2. Pathway involved in the pathogenesis of** *P4HB* **in TCGA-KIRC with GSEA.** Enrichment curves are shown for a ctivated gene sets related to pentose phosphate pathway (A), fructose and mannose metabolism(B), amino sugar and nucleotide sugar metabolism (C), galactose metabolism (D), intestinal immune network for IGA production (E), proteasome (F), N-glycan biosynthesis (G).