



**Supplementary Figure S3. Activity Score of Signaling Pathways Related to Cancer, where RYK is Underregulated.** Figures (A) to (H) present boxplots illustrating the expression of RYK in high and low expression groups, using data obtained from the TCGA project. Specifically, (A) represents Liver hepatocellular carcinoma (LIHC), (B), (C), and (D) represent Esophageal carcinoma (ESCA), (E) and (F) represent Kidney renal papillary cell carcinoma (KIRP), and (G) and (H) represent Breast invasive carcinoma (BRCA). High expression (High expr) and low expression (Lower expr) groups are compared, and false discovery rates (FDR) are considered. All the relationships depicted have a significance level of less than 0.05.