## **SUPPLEMENTARY FIGURES**



Supplementary Figure 1. The workflow of this study.



**Supplementary Figure 2.** (A, B) Survival analyses for DFS (A) and OS (B) between low- and high-FS groups in TCGA-TNBC cohort. (C) Multivariate Cox regression analysis confirmed that FS could serve as an independent prognostic biomarker for TCGA-TNBC samples. (D) ssGSEA showed three distinct immunity phenotypes were identified in TCGA cohort. (E) The rate of different immunity phenotypes between the low- and high FS groups. (F) Cibersort revealed the abundance of each TME infiltrating cells between the low- and high-FS groups. (G) MCPcounter revealed the abundance of each immune infiltrating cell types between the low- and high-FS groups. (H, I) ESTIMATE analysis exhibited the diversity of the immune (H) and stromal score (I) between the low- and high-FS groups. (J) The expression of immune profiles between the low- and high-FS groups in TCGA cohort.



Supplementary Figure 3. (A, B) Survival analyses for MFS (A) and OS (B) between low- and high- FS groups in GSE58812 cohort. (C) ssGSEA showed three distinct immunity phenotypes were identified in GSE58812 cohort. (D) The rate of different immunity phenotypes between the low- and high FS groups. (E) Cibersort revealed the abundance of each TME infiltrating cells between the low- and high-FS groups. (F) MCPcounter revealed the abundance of each immune infiltrating cell types between the low- and high-FS groups. (G, H) ESTIMATE analysis exhibited the diversity of the immune (G) and stromal score (H) between the low- and high-FS groups. (I) The expression of immune profiles between the low- and high-FS groups in GSE58812 cohort.



Supplementary Figure 4. Identification of novel candidate compounds targeting the selected FS gene signatures.