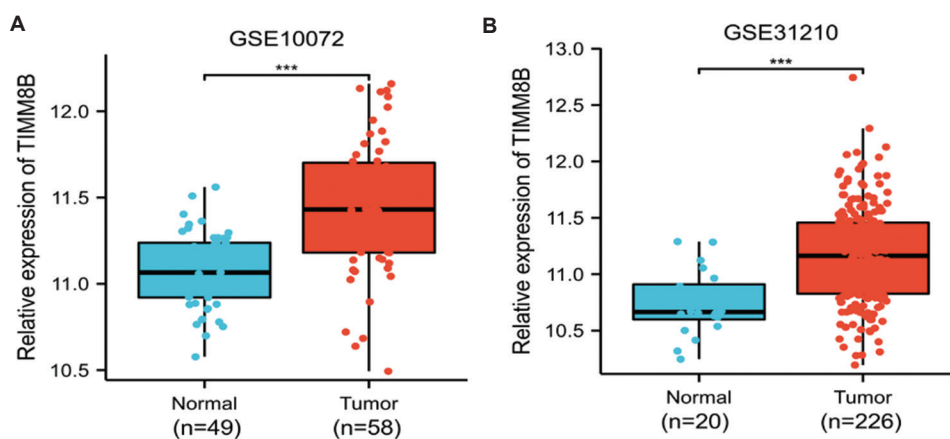


ORIGINAL RESEARCH ARTICLE

Investigating the role of *TIMM8B* in lung adenocarcinoma: Expression patterns, prognostic value, and therapeutic implications

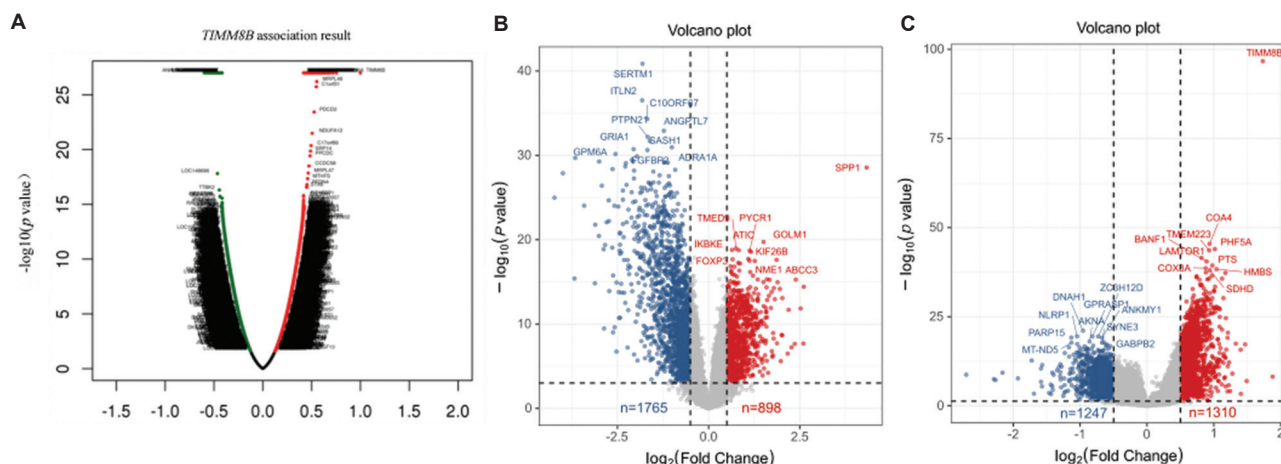
Supplementary File



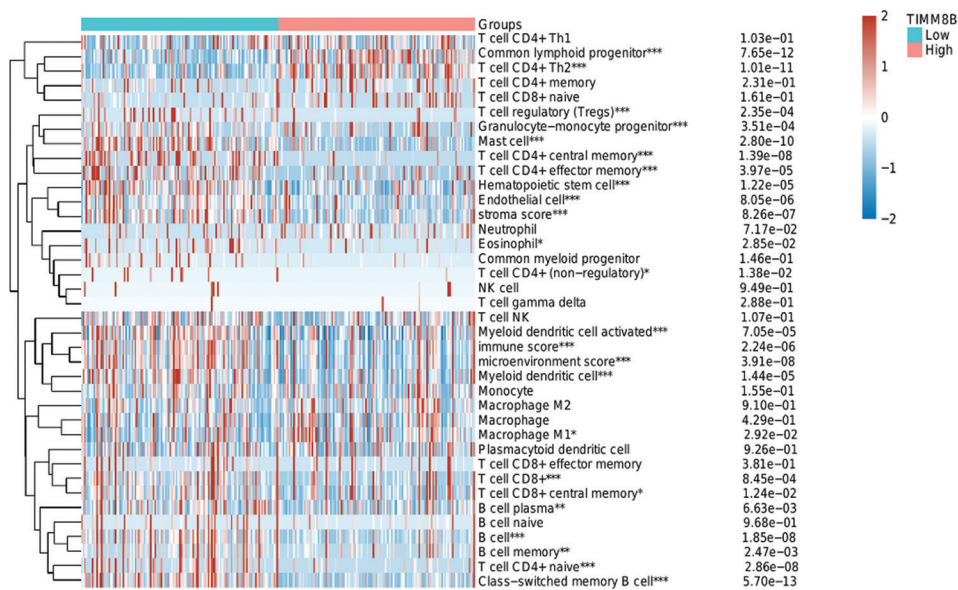
**Figure S1.** Differential expression analysis of translocase of inner mitochondrial membrane 8 homolog B (*TIMM8B*) in normal and tumor tissues using the Mann-Whitney U-test. (A) Visualization of *TIMM8B* expression in the GSE10072 cohort. (B) Illustration of *TIMM8B* expression in the GSE31210 cohort. Statistical significance is indicated by \* for  $p < 0.05$ , \*\* for  $p < 0.01$ , and \*\*\* or \*\*\*\* for  $p < 0.001$ .



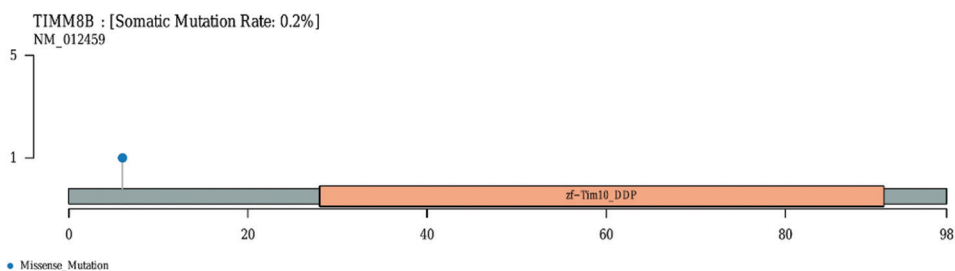
**Figure S2.** Survival analysis of Translocase of inner mitochondrial membrane 8 homolog B expression on overall survival in various cancer types.  $\text{Log}_{10}$ -transformed hazard ratios from the Cox regression model for various cancer types using the Gene Expression Profiling Interactive Analysis 2 database.



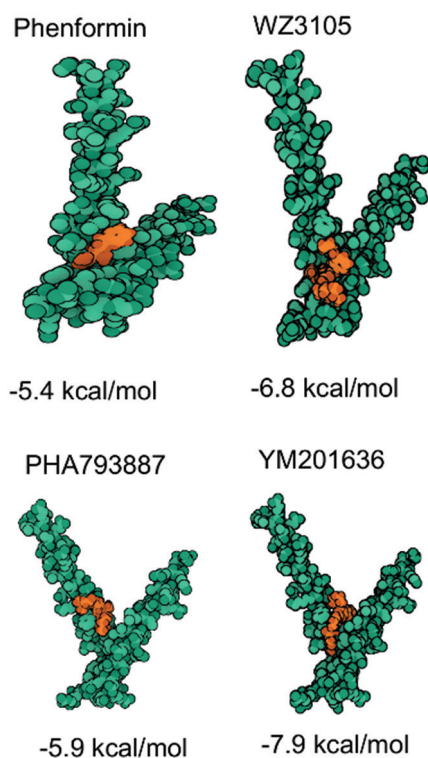
**Figure S3.** Analysis of translocase of inner mitochondrial membrane 8 homolog B (*TIMM8B*)-related genes in lung adenocarcinoma (LUAD). (A) Co-expression analysis of genes associated with *TIMM8B* in LUAD using LinkedOmics and visualization via a volcano plot. (B) Volcano plot comparing differentially expressed genes (DEGs) between LUAD and normal tissue in GSE43458. (C) Volcano plot comparing DEGs between *TIMM8B*<sup>high</sup> and *TIMM8B*<sup>low</sup> patients in LUAD.



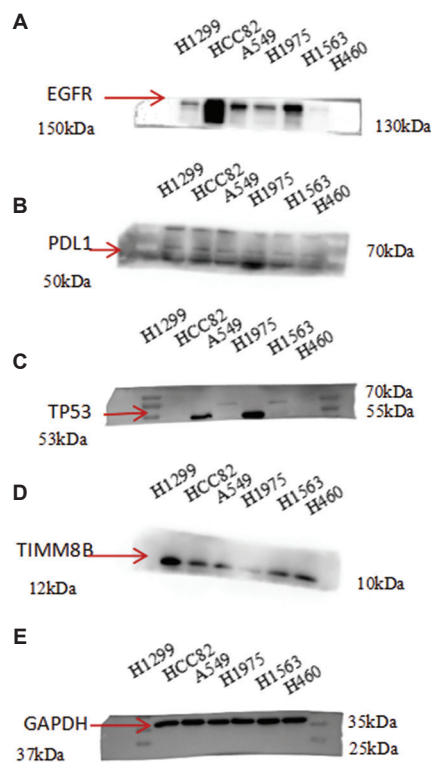
**Figure S4.** Correlation of translocase of inner mitochondrial membrane 8 homolog B (*TIMM8B*) with immune cell types in lung adenocarcinoma (LUAD). Heatmap showing immune cell signatures in *TIMM8B*<sup>low</sup> and *TIMM8B*<sup>high</sup> groups of TCGA LUAD. Statistical significance is denoted by \* for  $p < 0.05$ , \*\* for  $p < 0.01$ , and \*\*\* for  $p < 0.001$ . The Wilcox test was used for comparisons.



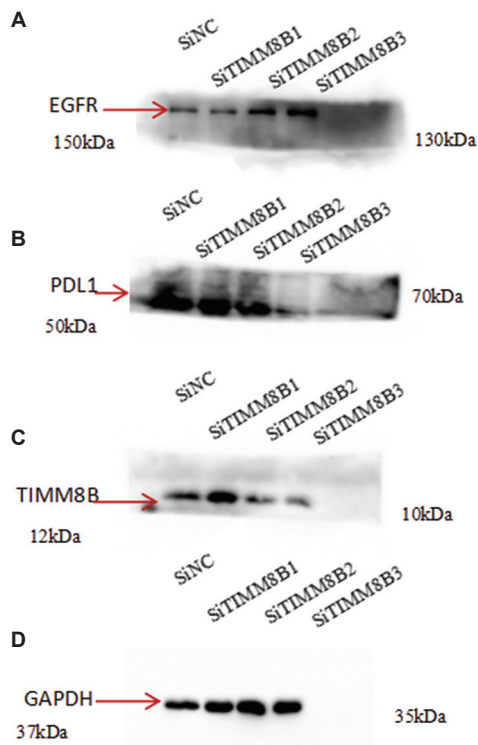
**Figure S5.** Translocase of inner mitochondrial membrane 8 homolog B (*TIMM8B*) mutation analysis in TCGA lung adenocarcinoma (LUAD). Lollipop charts representing mutations in the *TIMM8B* gene within the TCGA LUAD cohort ( $n = 516$ ).



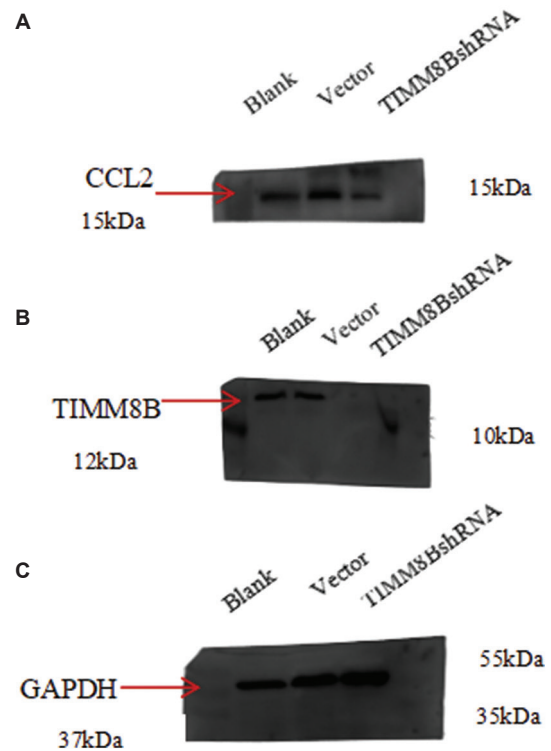
**Figure S6.** Stable interactions between translocase of inner mitochondrial membrane 8 homolog B, and drug molecules in lung adenocarcinoma. Binding mode of phenformin, PHA793887, WZ3105, and YM201636 to *TIMM8B*.



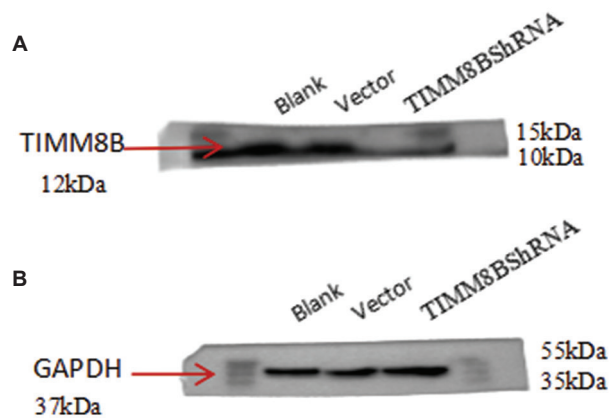
**Figure S7.** Original images for western blotting for EGFR, PDL1, TP53, translocase of inner mitochondrial membrane 8 homolog B (*TIMM8B*), and GAPDH in Figure 11A. (A) Western blotting for EGFR (150 kDa), (B) western blotting for PD-L1 (50 kDa), (C) western blotting for TP53 (53 kDa), (D) western blotting for *TIMM8B* (12 kDa), and (E) western blotting for GAPDH (37 kDa).



**Figure S8.** Original images for western blotting for EGFR, PDL1, Translocase of inner mitochondrial membrane 8 homolog B (*TIMM8B*), and GAPDH in Figure 11C. (A) Western blotting for EGFR (150 kDa), (B) western blotting for PDL1 (50 kDa), (C) western blotting for *TIMM8B* (12 kDa), and (D) western blotting for GAPDH (37 kDa).



**Figure S10.** Original images for western blotting for CCL2, translocase of inner mitochondrial membrane 8 homolog B, and GAPDH in Figure 12H. (A) Western blotting for CCL2 (32 kDa), (B) western blotting for (12 kDa), and (C) western blotting for GAPDH (37 kDa).



**Figure S9.** Original images for western blotting for translocase of inner mitochondrial membrane 8 homolog B (*TIMM8B*), and GAPDH in Figure 11E. (A) Western blotting for *TIMM8B* (12 kDa), and (B) western blotting for GAPDH (37 kDa).