



**S9 Fig.** Validation of *TM4SF4* and *LRRK2* as an outlier gene. (A) Scatter plot graph is shown 7 membrane protein outlier genes selected from nCounter gene expression assay data. Red and gray circles indicate the outlier and others, respectively. The blue line is the median of the gene expression level. (B) Dot plots represent the outlier levels (OL) and modified Z-score (mZ) of TM4SF4 in lung adenocarcinoma cell lines (Cancer Cell Line Encyclopedia [CCLE]), lung adenocarcinoma tissues (The Cancer Genome Atlas [TCGA]), and 140 lung adenocarcinoma patient samples. (C) Dot plots represent outlier level (OL) and modified Z-score of LRRK2 in breast cancer cell lines (CCLE) and breast invasive carcinoma tissues (TCGA). Red and gray circles indicate the outlier and others, respectively.