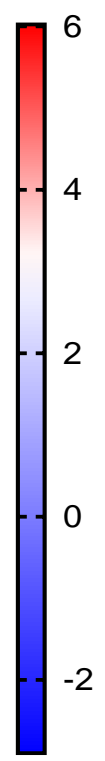
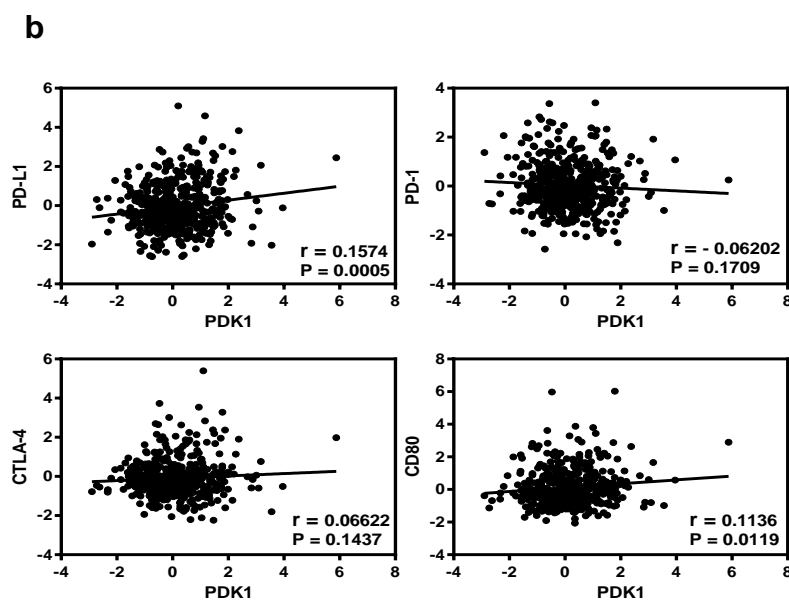
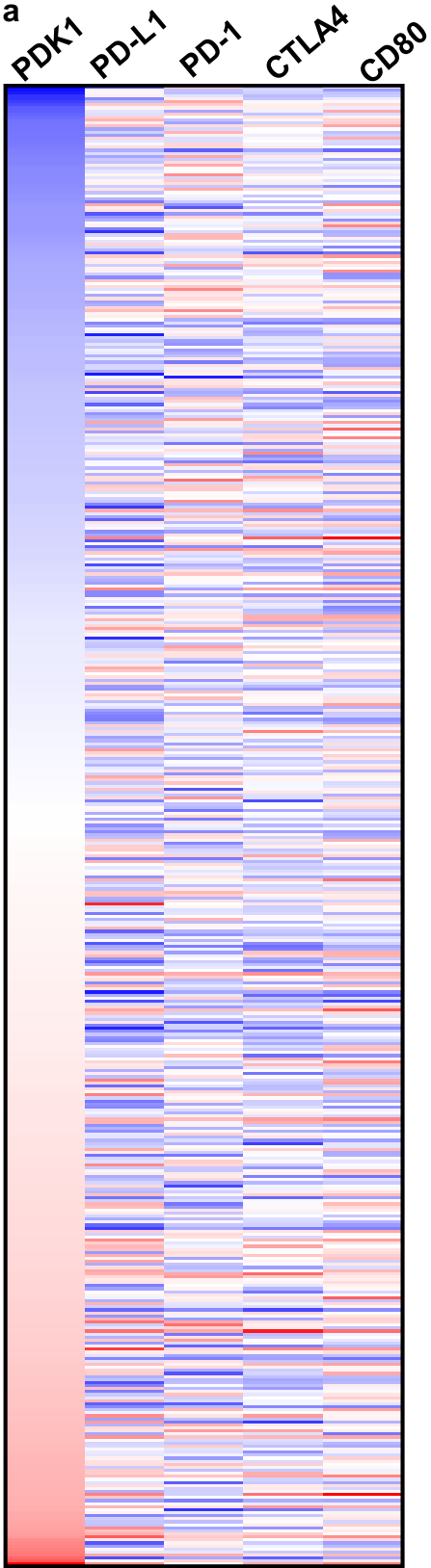
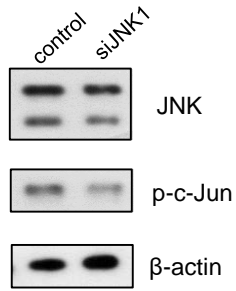


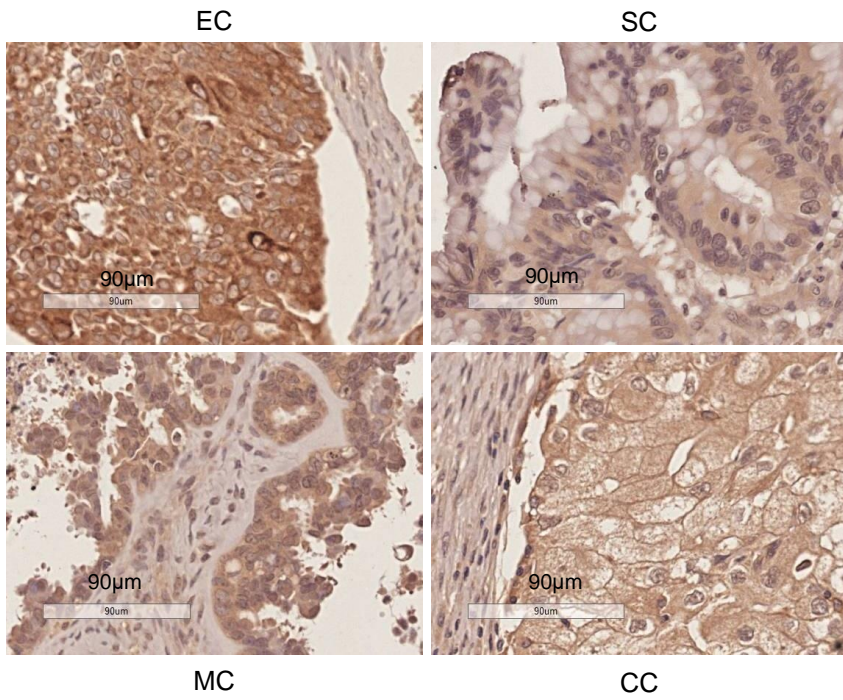
Supplementary Fig. 1 Correlation between PD-L1 and key glycolytic genes expression. **a-b** Heat map (a) and Spearman's rho analysis (b) showing these glycolysis genes expression with PD-L1. **c** qPCR assessment of PD-L1 mRNA expression in A2780CP cells with knockdown of PFKFB3/PFKP. Representative data from three experiments are shown (***) $P < 0.001$).



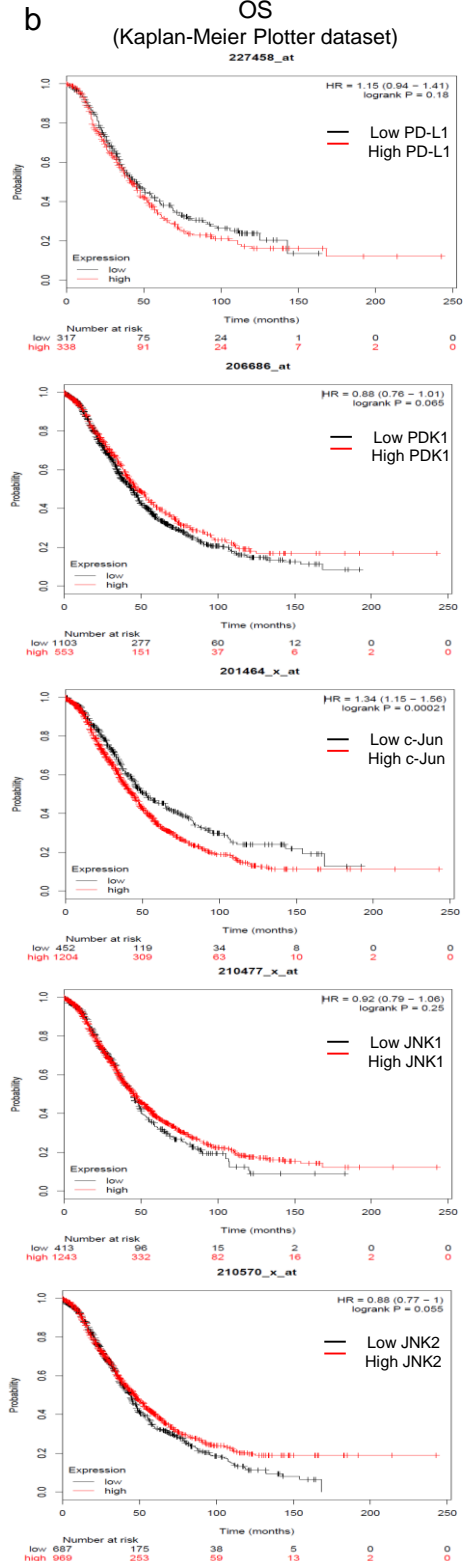
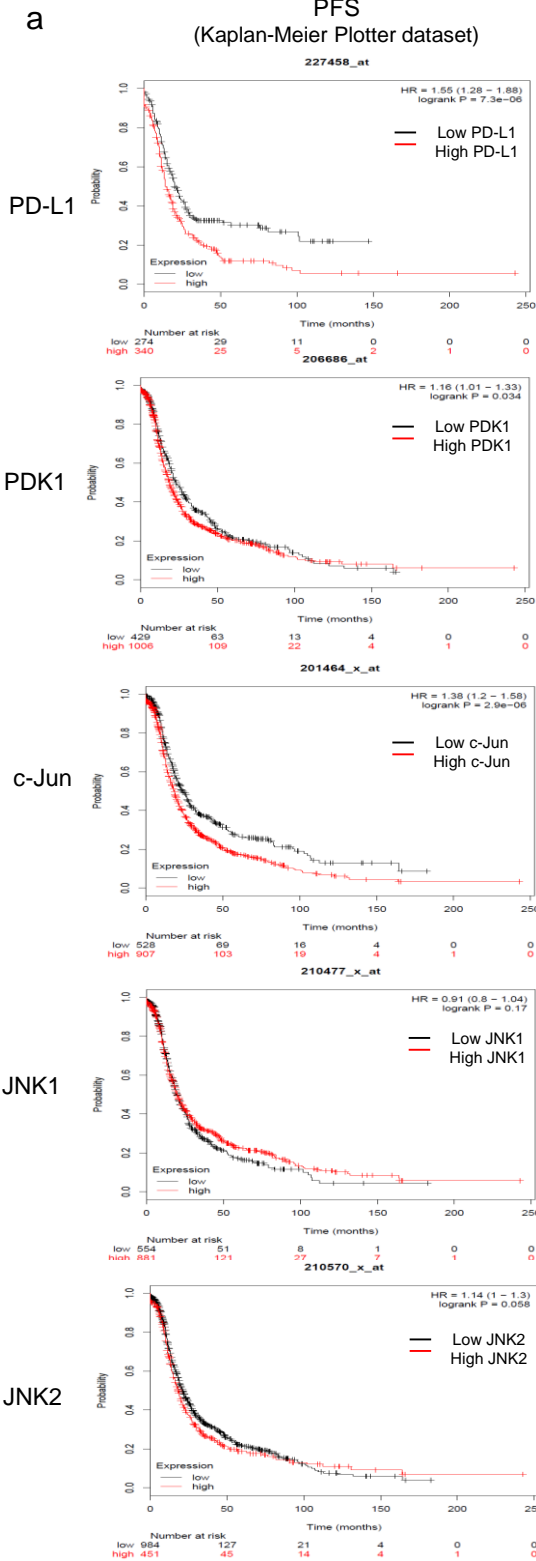
Supplementary Fig. 2 Correlation between PDK1 and immune checkpoint molecule expression. **a-b** Heat map (a) and Spearman's rho analysis (b) of the association between immune checkpoint genes and PDK1 expression.



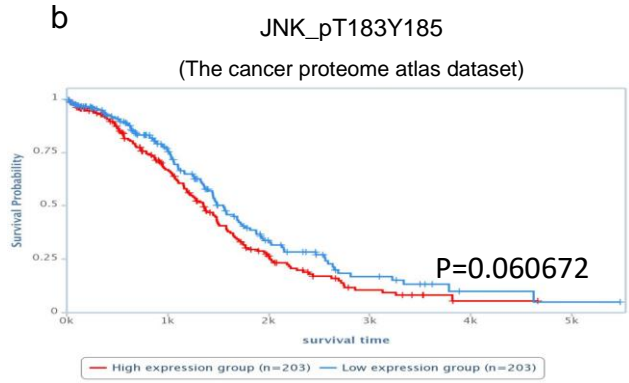
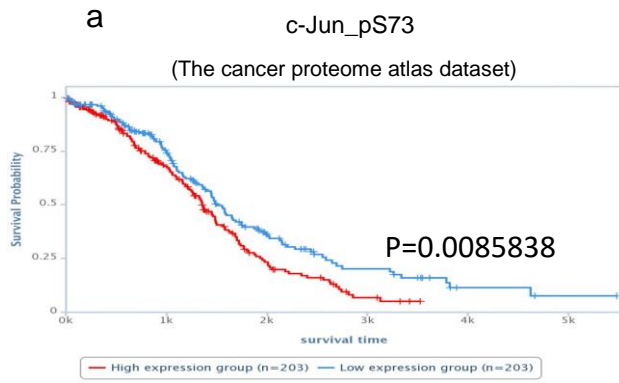
Supplementary Fig. 3 Immunoblot analysis of JNK and p-c-Jun in OVCAR3 cells with overexpression of PDK1 and transient knockdown of JNK1.



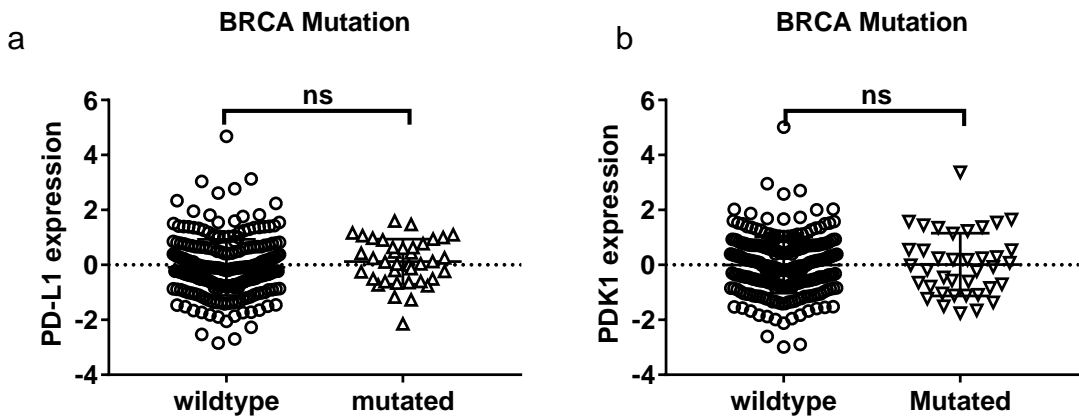
Supplementary Fig. 4 Immunohistochemical staining of PD-L1 in endometrioid(EC), serous(SC), mucinous(MC), and clear cell(CC) carcinomas.



Supplementary Fig. 5 PD-L1, PDK1 and c-Jun levels are predictive markers of poor survival rate in ovarian cancer patients based on Kaplan Meier plotter (ovarian cancer). Progression-free survival (PFS)(a) and overall survival (OS)(b) analysis for PD-L1, PDK1, cJun, JNK1 and JNK2 based on Kaplan Meier plotter (ovarian cancer). Cut-off is the median value.



Supplementary Fig. 6 pS73-cJun are predictive markers of poor survival in ovarian cancer patients from The Cancer Proteome Atlas (TCPA). Survival analysis in relation to pS73-cJun (a) and pT183Y185-JNK (b).



Supplementary Fig. 7 BRCA mutation has no influence on PD-L1 and PDK1 expression. PD-L1 **(a)** and PDK1 **(b)** expression in tissues with mutant or wild-type BRCA based on the TCGA ovarian cancer dataset.