

Figure S1 Correlation between the mRNA expression of PLODs and TP53 mutation in patients with lung cancer (UALCAN). Correlation between PLOD expression and TP53 mutation in (A,B,C) LUAD and (D,E,F) LUSC. ***, $P < 0.001$. PLOD, procollagen-lysine, 2-oxoglutarate 5-dioxygenase; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma.

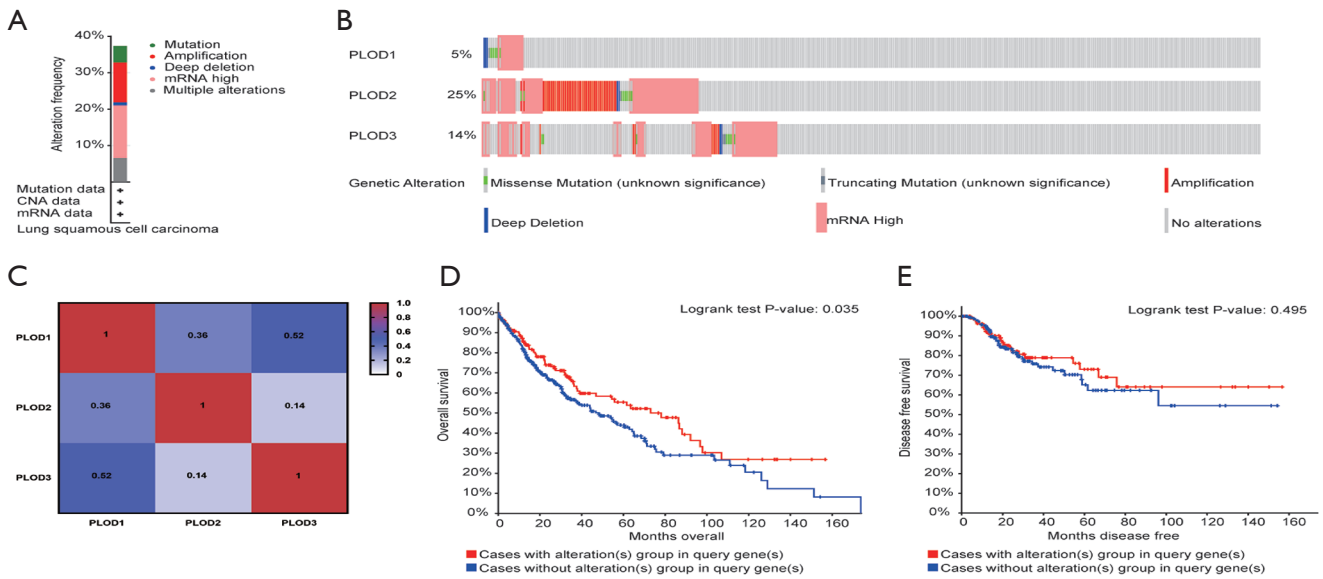


Figure S2 Expression mutation analysis of PLODs in LUSC (cBioPortal). (A) Summary of genetic alterations in PLODs. (B) Genetic alterations in individual PLOD family members. (C) Pearson correlation among PLOD1, PLOD2, and PLOD3. (D,E) Correlation between genetic alterations and survival (OS and DFS). PLOD, procollagen-lysine, 2-oxoglutarate 5-dioxygenase; LUSC, lung squamous cell carcinoma; OS, overall survival; DFS, disease-free survival.

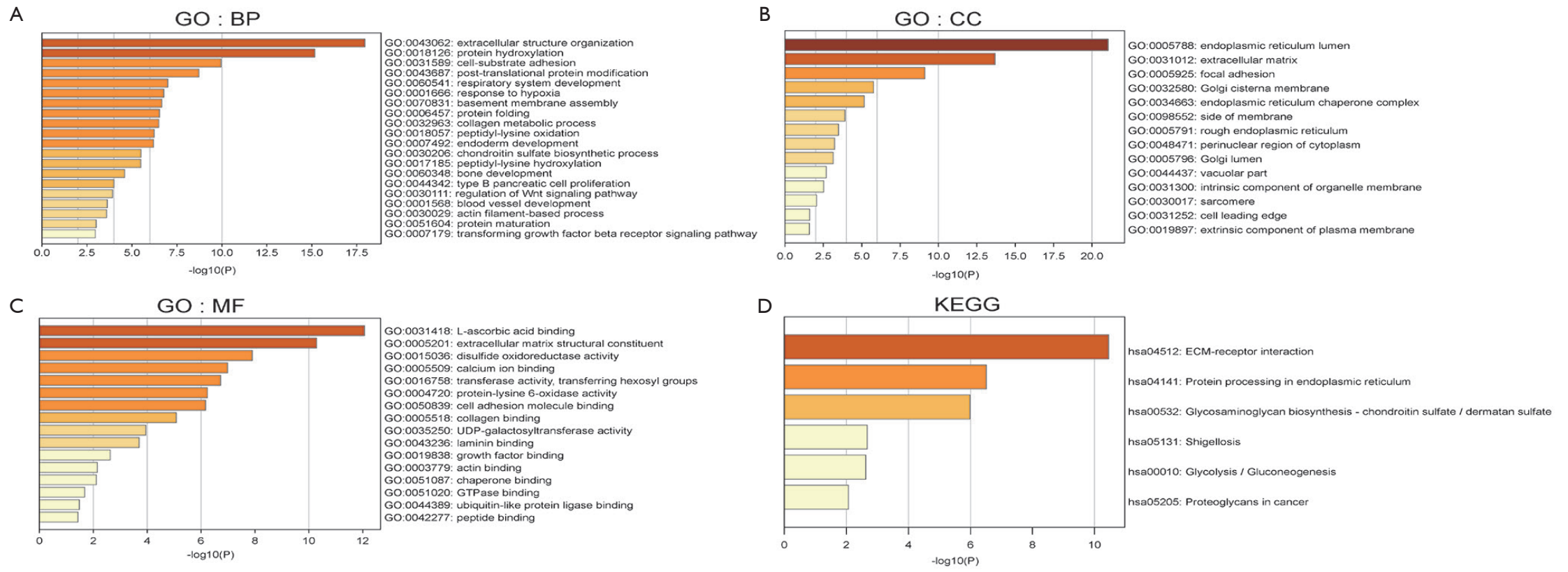


Figure S3 Functional enrichment analysis of co-expressed genes of PLODs in LUSC (Metascape). (A,B,C) GO enrichment analysis, including BP, CC, and MF. (D) KEGG enrichment analysis. PLOD, procollagen-lysine,2-oxoglutarate 5-dioxygenase. GO, Gene Ontology; BP, biological processes; CC, cellular components; MF, molecular functions; KEGG, Kyoto Encyclopedia of Genes.

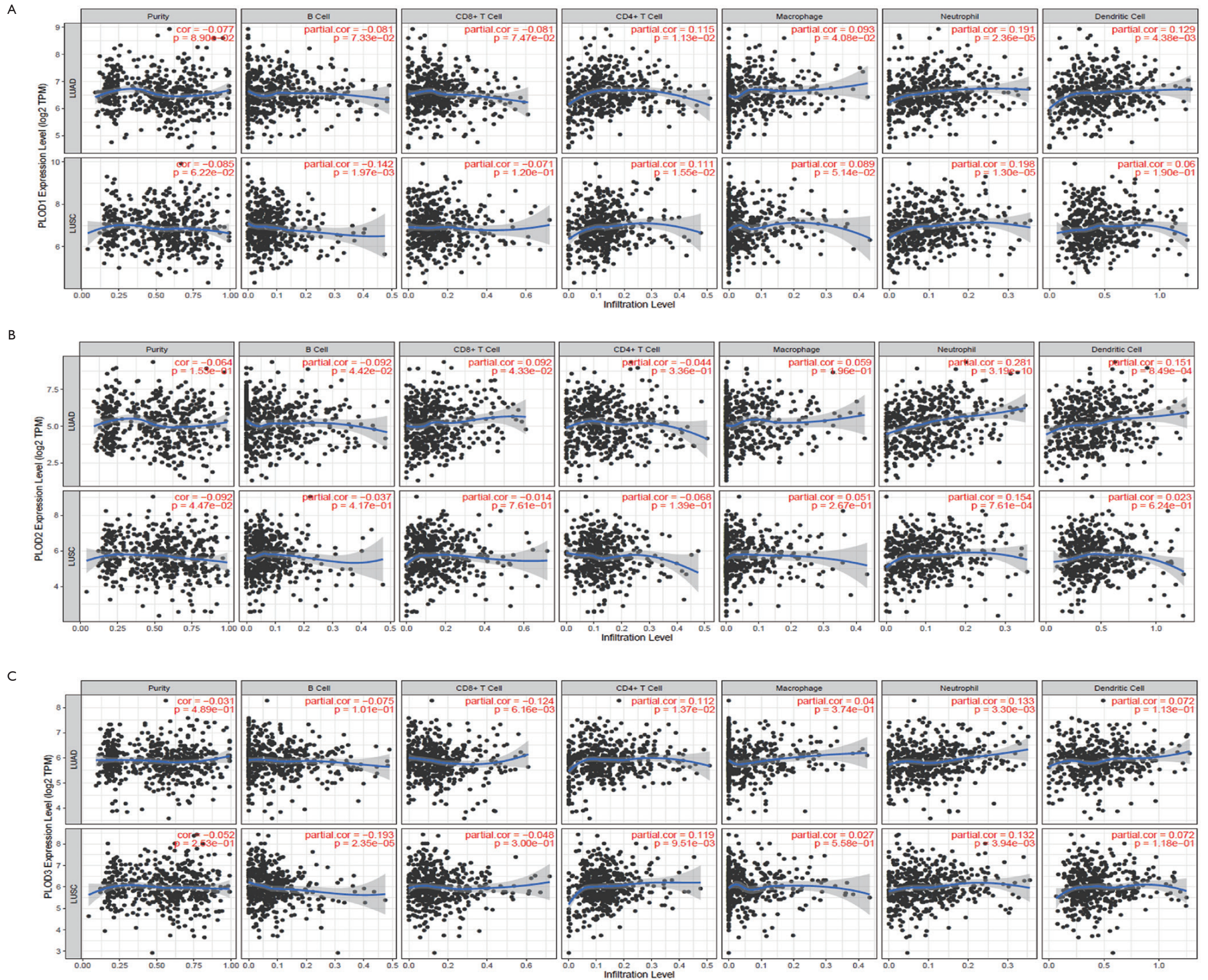


Figure S4 Correlation between the expression levels of PLOD family members and immune-infiltrating cells in LUAD and LUSC. (A) Correlation between PLOD1 expression and B cell, CD8+ T cell, CD4+ T cell, macrophage, neutrophil, and dendritic cell in LUAD and LUSC; (B) Correlation between PLOD2 expression and B cell, CD8+ T cell, CD4+ T cell, macrophage, neutrophil, and dendritic cell in LUAD and LUSC; (C) Correlation between PLOD3 expression and B cell, CD8+ T cell, CD4+ T cell, macrophage, neutrophil, and dendritic cell in LUAD and LUSC. PLOD, procollagen-lysine,2-oxoglutarate 5-dioxygenase; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma.

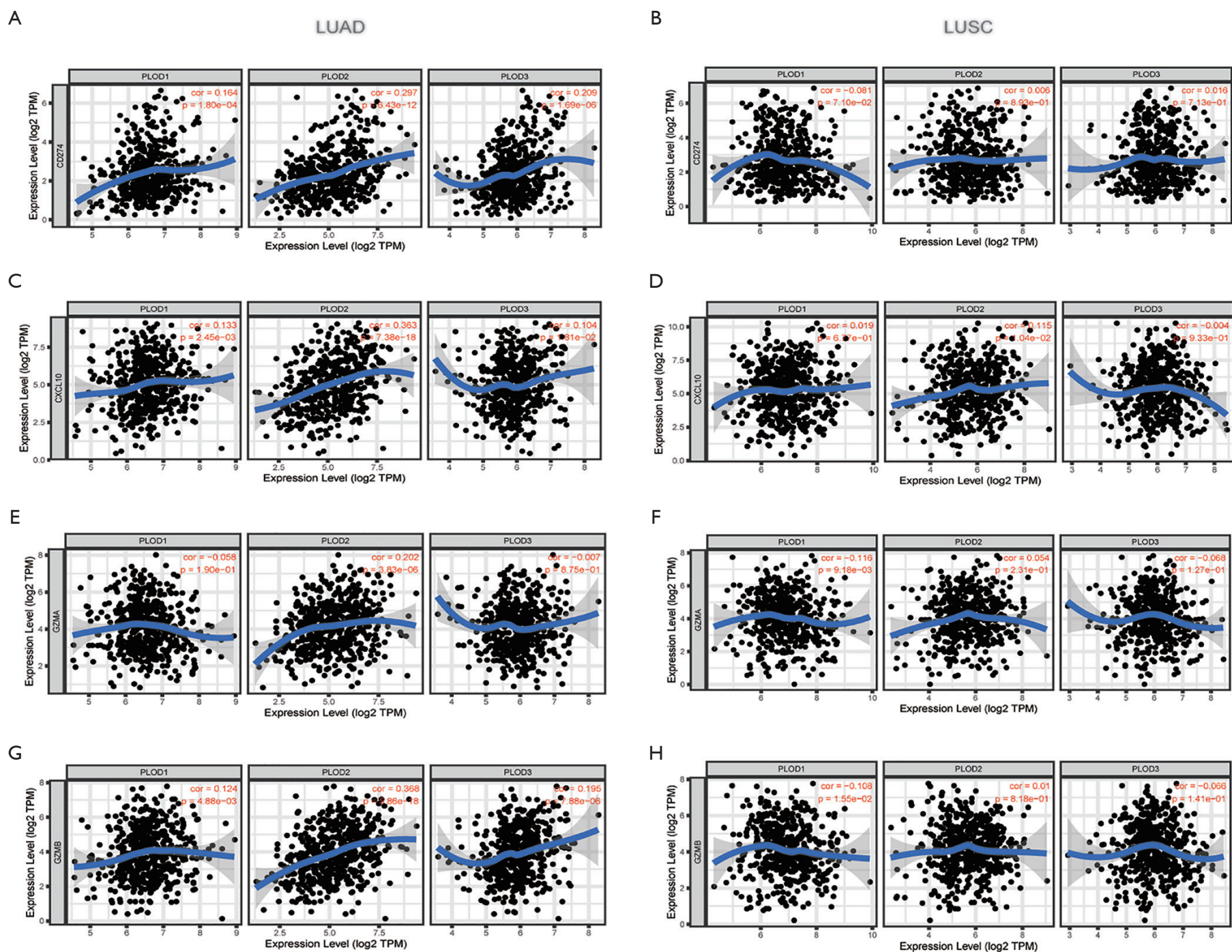


Figure S5 Correlation between the expression levels of PLOD family members and immune-related genes, including CD274, CXCL10, GZMA, and GZMB, in LUAD and LUSC. (A,B) Correlation between the expression levels of PLOD1/2/3 and CD274 in LUAD and LUSC; (C,D) Correlation between the expression levels of PLOD1/2/3 and CXCL10 in LUAD and LUSC; (E,F) Correlation between the expression levels of PLOD1/2/3 and GZMA in LUAD and LUSC; (G,H) Correlation between the expression levels of PLOD1/2/3 and GZMB in LUAD and LUSC. PLOD, procollagen-lysine,2-oxoglutarate 5-dioxygenase; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma; PD-L1 (CD274), programmed cell death 1 ligand 1; CXCL10, C-X-C motif chemokine ligand 10; GZMA, granzyme A; GZMB, granzyme B.