

Table S1 Change of tumor-infiltrating immune cells in pancreatic adenocarcinoma with loss of neuronal development gene

Gene	Cell																
	CD4 ⁺	CD8 ⁺	B	NK	Th1	Th2	Th17	Treg	PD-1 ⁺ CD4 ⁺	PD-1 ⁺ CD8 ⁺	EOMES ⁺ CD8 ⁺	M1-like TAM	M2-like TAM	TAN	Mature DC	Immature DC	
<i>DLG2</i>							▼****		▼*								
<i>NRCAM</i>		▼*															
<i>NRXN3</i>		▼*									▼*		▼***				
<i>MAPK10</i>	▼**	▼**								▼*							
<i>NCAM1</i>							▼****		▼*								
<i>NRG1</i>	▼**	▼**															
<i>ZNF667</i>		△*		▼**	△*										▼*		
<i>HIF1A</i>			△**										▼**				
<i>PDGFD</i>							▼****		▼*								
<i>ACSM3</i>			△*														
<i>AJAP1</i>																	
<i>KCNMA1</i>		▼*			△*												
<i>PKHD1</i>		▼*			△*	△*											
<i>CFTR</i>		▼*															
<i>C6</i>	▼**			▼**								▼*	▼**				
<i>ADCY5</i>					▼****	▼*	▼**		▼****	▼****		▼****	▼*				▼**
<i>SCN9A</i>												▼**	▼*				
<i>PRKCE</i>							▼*	△*								△*	
<i>PTPRM</i>																	
<i>NBEA</i>																	

▼, decrease; △, increase. *, 0.01 ≤ P < 0.05. **, 0.001 ≤ P < 0.01; ***, 0.0001 ≤ P < 0.001; ****, P < 0.0001. NK, natural killer; Th, T helper; Treg, regulatory T; TAM, tumor-associated macrophages; TAN, tumor-associated neutrophils; DC, dendritic cell.

Table S2 Change of tumor-infiltrating immune cells in pancreatic adenocarcinoma with gain of neuronal development gene

Gene	Cell																
	CD4 ⁺	CD8 ⁺	B	NK	Th1	Th2	Th17	Treg	PD-1 ⁺ CD4 ⁺	PD-1 ⁺ CD8 ⁺	EOMES ⁺ CD8 ⁺	M1-like TAM	M2-like TAM	TAN	Mature DC	Immature DC	
<i>DLG2</i>		▼*															▼***
<i>NRCAM</i>				▼**		▼*											
<i>NRXN3</i>																	
<i>MAPK10</i>																▼*	
<i>NCAM1</i>		▼*															▼***
<i>NRG1</i>															▼**		▼***
<i>ZNF667</i>																	
<i>HIF1A</i>				▼**													
<i>PDGFD</i>		▼*															▼***
<i>ACSM3</i>																	
<i>AJAP1</i>																▼*	
<i>KCNMA1</i>		▼*		▼*													▼*
<i>PKHD1</i>						▼*									▼**		▼****
<i>CFTR</i>				▼**													
<i>C6</i>																	
<i>ADCY5</i>																	
<i>SCN9A</i>																	
<i>PRKCE</i>																▼**	
<i>PTPRM</i>																	
<i>NBEA</i>																	

▼, decrease; △, increase. *, 0.01 ≤ P < 0.05. **, 0.001 ≤ P < 0.01; ***, 0.0001 ≤ P < 0.001; ****, P < 0.0001. NK, natural killer; Th, T helper; Treg, regulatory T; TAM, tumor-associated macrophages; TAN, tumor-associated neutrophils; DC, dendritic cell.