

Table S1 The primary antibodies used in the research

Reagent	Concentration	Type	Brand	Origin
Anti-PLCXD2 antibody	1:500	PA5-63216	Invitrogen	USA
Anti-cytokeratin (CK) antibody	1:800	orb69073	Biorbyt	UK
Anti-CD3 antibody	1:300	85061S	CST	USA
Anti-CD4 antibody	1:400	ab133616	Abcam	UK
Anti-CD8 antibody	1:800	85336S	CST	USA
Anti-CD56 antibody	1:300	3576	CST	USA
Anti-CD66b antibody	1:600	arg66287	Airgobio	China
Anti-CD68 antibody	1:1,000	76437S	CST	USA
Anti-CD86 antibody	1:1,200	orb388891	Biorbyt	UK
Anti-CD163 antibody	1:200	93498S	CST	USA
Anti-Lamp3 antibody	1:600	ab111090	Abcam	UK
Anti-PD-1 antibody	1:600	86163	CST	USA
Anti-PD-L1 antibody	1:200	13684T	CST	USA
Anti-CTLA-4 antibody	1:600	orb527271	Biorbyt	UK

Table S2 The relationship between PLCXD2 protein expression in cancer cells and immune markers in the TME of HNSC tissues

PLCXD2 expression in cancer cells	Tumor intratumoral		Tumor stroma	
	Pearson correlation	P	Pearson correlation	P
CD4 ⁺ T	0.174**	0.004	0.236**	<0.001
CD8 ⁺ T	0.112	0.064	0.313**	<0.001
CD56 ⁺	-0.073	0.240	-0.061	0.330
CD66b ⁺	0.085	0.166	0.054	0.389
CD68 ⁺ CD86 ⁺	0.033	0.595	0.048	0.440
CD68 ⁺ CD163 ⁺	0.199**	0.001	0.174**	0.005
Lamp3 ⁺	0.204**	0.008	0.212**	0.005
CTLA-4 ⁺	0.262**	<0.001	0.115	0.061
PD-1 ⁺	-0.129*	0.036	-0.131	0.033
PD-L1 ⁺	-0.053	0.387	-0.087	0.155

*, P<0.05; **, P<0.01.

Table S3 The relationship between PLCXD2 protein expression in stroma cells and immune markers in the TME of HNSC tissues

PLCXD2 expression in stroma cells	Tumor intratumoral		Tumor stroma	
	Pearson correlation	P	Pearson correlation	P
CD4 ⁺ T	-0.008	0.899	0.083	0.172
CD8 ⁺ T	-0.035	0.596	0.146*	0.015
CD56 ⁺	-0.083	0.183	-0.018	0.771
CD66b ⁺	0.071	0.249	-0.006	0.927
CD68 ⁺ CD86 ⁺	0.034	0.586	0.047	0.454
CD68 ⁺ CD163 ⁺	0.124*	0.045	0.041	0.514
Lamp3 ⁺	0.069	0.369	-0.037	0.630
CTLA-4 ⁺	0.090	0.144	0.111	0.069
PD-1 ⁺	-0.008	0.898	0.034	0.597
PD-L1 ⁺	-0.064	0.296	-0.005	0.941

*, P<0.05; **, P<0.01.