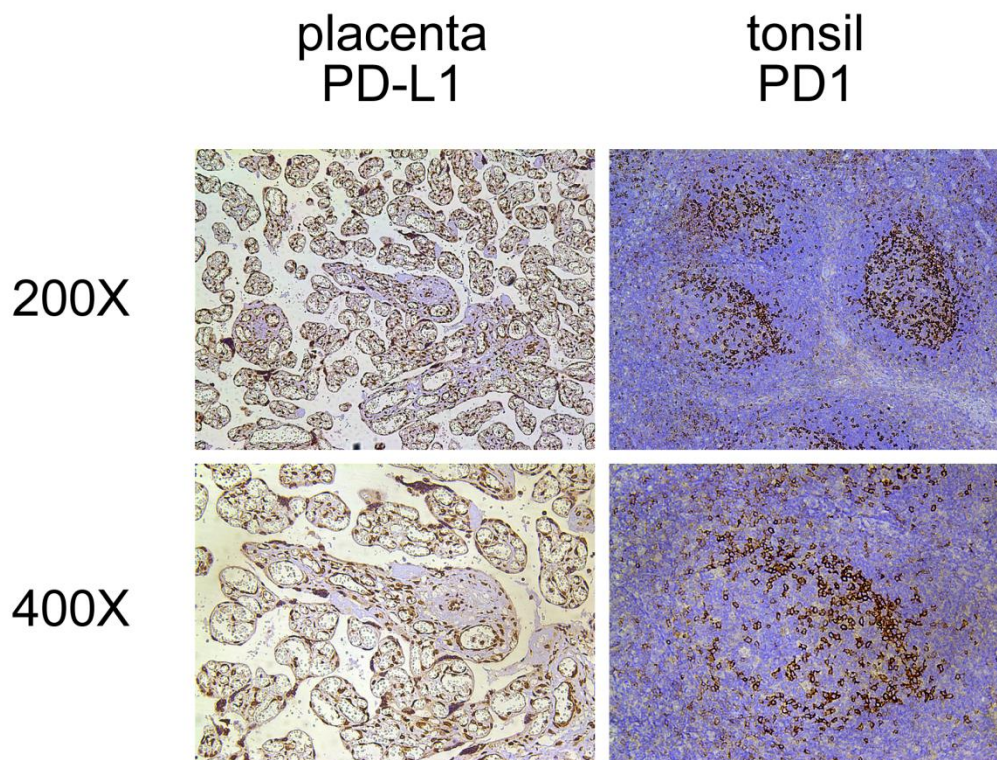
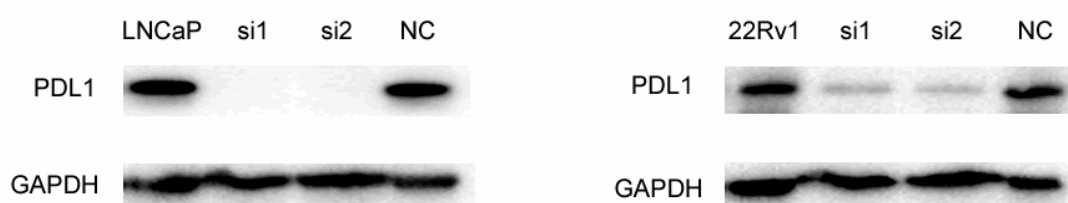


Supplementary histopathological assessment and IHC

The 4-mm-thick sections of formalin-fixed paraffin-embedded representative PCa tissue blocks were deparaffinized in a series of xylene and hydrated in a graded series of ethanol solutions. Heat-mediated antigen retrieval was performed in 10 mM Tris/EDTA buffer solution (pH 7.0) at 100°C for 20 min. Endogenous peroxidase was quenched with 3% hydrogen peroxide for 15 min at 37°C, and nonspecific binding was blocked with 10% normal goat serum for 1 h at room temperature. Sections were then incubated with primary antibody (dilution in Leica antibody diluent) at 37°C for 30 min. Chromogenic detection was carried out using a peroxidase-conjugated secondary antibody (30 min) and DAB reagents (5 min). Tissue sections were counterstained with 0.1% hematoxylin.



Supplementary Figure 1 – Representative immunohistochemical staining of human placenta tissues and tonsil tissues for PD-1 and PD-L1 antibody respectively.



Supplementary Figure 2 – LNCaP and 22Rv1 cells were transfected with siRNAs (si1, si2) targeting the PD-L1, negative control siRNA (si-NC) and no siRNA controls. Equal loading was identified by probing for GAPDH. Western blot analysis of LNCaP and 22Rv1 cells using PD-L1 monoclonal antibody ABM4E54.

Table – The IHC staining intensity score of PDL1 and PD1 of each patient

Patient ID	PD1				PDL1			
	percentage of weak stained cells	percentage of moderate stained cells	percentage of strong stained cells	staining intensity score	percentage of weak stained cells	percentage of moderate stained cells	percentage of strong stained cells	staining intensity score
1001	0	0	0	0	26	33	33	191
1002	0	0	0	0	34	10	5	69
1003	0	0	0	0	21	33	21	150
1004	4	0	0	4	37	19	13	114
1005	0	0	0	0	44	7	4	70
1006	10	2	1	17	17	17	35	156
1007	1	0	0	1	17	20	24	129
1008	11	2	0	15	23	26	22	141
1009	5	1	0	7	15	18	22	117
1010	15	7	5	44	22	8	5	53
1011	0	0	0	0	17	2	2	27
1012	6	0	0	6	24	24	23	141
1013	2	0	0	2	12	17	37	157
1014	0	3	0	6	17	24	17	116
1015	0	0	0	0	16	26	29	155
1016	0	3	0	6	40	8	13	95
1017	3	0	0	3	21	33	10	117
1018	2	0	0	2	13	31	26	153
1019	5	1	0	7	7	19	69	252
1020	1	0	0	1	10	29	21	131
1021	2	1	0	4	2	1	1	7
1022	4	0	0	4	12	26	37	175
1023	9	1	0	11	32	18	9	95
1024	1	0	0	1	12	40	16	140
1025	1	0	0	1	31	11	14	95
1026	0	0	0	0	11	4	1	22
1027	11	2	1	18	11	38	13	126
1028	0	0	0	0	23	5	1	36
1029	2	0	0	2	22	55	23	201
1030	0	0	0	0	13	35	22	149

1031	0	0	0	0	23	13	13	88
1032	0	0	0	0	55	12	3	88
1033	6	0	0	6	14	22	42	184
1034	0	0	0	0	20	11	8	66
1035	0	0	0	0	12	28	22	134
1036	3	0	0	3	28	39	33	205
1037	2	0	0	2	5	14	71	246
1038	16	8	3	41	8	10	6	46
1039	0	0	0	0	10	9	56	196
1040	1	0	0	1	9	11	73	250
1041	3	0	0	3	14	36	17	137
1042	0	0	0	0	16	33	35	187
1043	0	13	0	26	47	7	4	73
1044	0	0	0	0	15	8	5	46
1045	0	0	0	0	17	45	38	221
1046	0	0	0	0	11	5	2	27
1047	6	0	0	6	15	3	1	24
1048	1	0	0	1	17	13	11	76
1049	3	0	0	3	25	13	9	78
1050	5	0	0	5	22	9	6	58
1051	2	0	0	2	12	30	45	207
1052	20	9	6	56	45	23	20	151
1053	12	2	1	19	29	35	23	168
1054	0	0	0	0	11	9	3	38
1055	13	8	5	44	18	23	19	121
1056	1	0	0	1	18	21	19	117
1057	1	0	0	1	23	15	11	86
1058	11	7	6	43	23	60	5	158
1059	11	5	3	30	8	41	39	207
1060	3	1	0	5	45	19	5	98
1061	10	2	1	17	9	31	33	170
1062	9	2	1	16	13	27	21	130
1063	7	2	1	14	33	18	3	78
1064	11	3	1	20	33	13	7	80
1065	0	0	0	0	27	33	33	192
1066	0	0	0	0	33	10	5	68
1067	0	0	0	0	22	33	21	151
1068	3	0	0	3	36	19	13	113
1069	0	0	0	0	45	7	4	71
1070	11	2	1	18	16	17	35	155
1071	1	0	0	1	18	20	24	130
1072	10	2	0	14	22	26	22	140
1073	6	1	0	8	16	18	22	118
1074	14	7	5	43	21	8	5	52

1075	0	0	0	0	18	2	2	28
1076	7	0	0	7	23	24	23	140
1077	1	0	0	1	13	17	37	158
1078	0	3	0	6	16	24	17	115
1079	0	0	0	0	17	26	29	156
1080	0	3	0	6	39	8	13	94
1081	4	0	0	4	22	33	10	118
1082	1	0	0	1	12	31	26	152
1083	6	1	0	8	8	19	69	253
1084	0	0	0	0	9	29	21	130
1085	3	1	0	5	3	1	1	8
1086	3	0	0	3	11	26	37	174
1087	10	1	0	12	33	18	9	96
1088	0	0	0	0	11	40	16	139
1089	2	0	0	2	32	11	14	96
1090	0	0	0	0	10	4	1	21
1091	10	2	1	17	12	38	13	127
1092	0	0	0	0	22	5	1	35
1093	3	0	0	3	23	55	23	202
1094	0	0	0	0	12	35	22	148
1095	0	0	0	0	24	13	13	89
1096	0	0	0	0	54	12	3	87
1097	5	0	0	5	15	22	42	185
1098	0	0	0	0	19	11	8	65
1099	0	0	0	0	13	28	22	135
1100	4	0	0	4	27	39	33	204
1101	1	0	0	1	6	14	71	247
1102	17	8	3	42	7	10	6	45
1103	0	0	0	0	11	9	56	197
1104	0	0	0	0	8	11	73	249
1105	4	0	0	4	15	36	17	138
1106	0	0	0	0	15	33	35	186
1107	0	13	0	26	48	7	4	74
1108	0	0	0	0	14	8	5	45
1109	0	0	0	0	18	45	38	222
1110	0	0	0	0	10	5	2	26
1111	5	0	0	5	16	3	1	25
1112	2	0	0	2	16	13	11	75
1113	2	0	0	2	26	13	9	79
1114	6	0	0	6	21	9	6	57
1115	1	0	0	1	13	30	45	208
1116	21	9	6	57	44	23	20	150
1117	11	2	1	18	30	35	23	169
1118	0	0	0	0	10	9	3	37

1119	14	8	5	45	19	23	19	122
1120	0	0	0	0	17	21	19	116
1121	2	0	0	2	24	15	11	87
1122	10	7	6	42	22	60	5	157
1123	12	5	3	31	9	41	39	208
1124	2	1	0	4	44	19	5	97
1125	11	2	1	18	10	31	33	171
1126	8	2	1	15	34	18	3	79
1127	12	3	1	21	32	13	7	79
