

Supplementary Table 1 Immune Checkpoint Correlation Analysis

ICs	-Log10(p value[PTEN-defect])	-Log10(p value[TP53-defect])	LOG2(RNA Seq V2 RSEM [PTEN/TP53-defect][+1])
CTLA4	0.16274694	0.15774053	4.53911825
PDCD1	0.42568078	0.07056209	4.5296151
CD274	0.31612947	0.17522777	3.57483181
PDCD1LG2	0.47690639	0.28185584	4.29042482
VSIR	2.38305618	1.90659762	9.04673555
BTLA	0.16014338	0.16191527	3.44003963
TIGIT	0.11316293	0.04156661	5.08626688
CD96	0.00379718	0.00420894	6.19159193
HAVCR2	0.3072053	0.77643146	6.78448512
TIMD4	2.56241391	1.74788235	2.63033858
CD244	0.76876112	0.10822276	3.37851672
SLAMF6	0.0829356	0.06477844	5.66454329
LAIR1	0.1941533	0.1549567	7.41758756
LAG3	1.93710133	0.29162258	5.74946782
CD160	3.76179554	0.72971056	3.06481164
TNFRSF21	5.13252821	1.45703082	10.7009693
CD47	0.18243226	0.82962531	11.5148767
NT5E	1.22949054	1.10619968	7.82217949
CD276	20.6534106	8.08234505	11.9987608
VTCN1	1.37110976	0.87331387	5.91647811
KIR3DL1	0.08123736	0.03229961	0.49513433
TNFRSF18	0.75299224	1.82593769	5.66592201
LY9	0.06040417	0.04552212	4.76082092
CD28	1.35426183	1.15488123	5.34422538
CD80	0.67875117	1.04413536	2.91951259
CD86	0.11023468	0.43928618	6.41972868
ICOS	0.07725845	0.23517343	3.92688092
ICOSLG	0.20340828	0.21757632	8.13316773
CD226	0.65387014	0.82102689	3.78897003
CRTAM	0.14845963	0.05311567	3.56771623
HAVCR1	0.36562405	0.29920841	0.3676252
CD2	0.04213605	0.00742873	7.13018248
CD48	0.03985347	0.13765503	7.23804191
CD58	2.15058495	0.7584577	7.02287027
SLAMF1	0.03082465	0.00552926	4.22054469
CD84	0.78148857	0.27604837	5.40611143
SLAMF7	0.00441333	0.10998709	6.67902009
TNFRSF9	0.05592382	0.08662368	2.38786007
TNFSF9	1.40827986	0.36562682	3.5369351
TNFRSF4	0.48760906	0.17501622	4.80128865
TNFSF4	1.45227202	0.99548258	6.56032354
CD27	0.10414941	0.04184867	6.28584158
CD70	1.28202848	0.2023421	1.81780332
TNFRSF8	0.57853388	0.26176458	3.04349378
TNFRSF14	0.01077391	0.17134679	10.9072119
TNFSF14	0.14487808	0.12790467	2.1415442
LTBR	0.446262	0.62377149	11.5658961
TNFRSF25	1.31167398	0.36611955	5.34525576
TNFSF15	0.08885908	1.43702934	5.49556723
TNFRSF6B	0.86120542	0.48739326	5.64799253
CD40	3.23936698	2.48519172	7.67760042
CD40LG	0.57091779	0.12106337	4.23258256
IL2RB	0.15204204	0.09916886	7.33567095