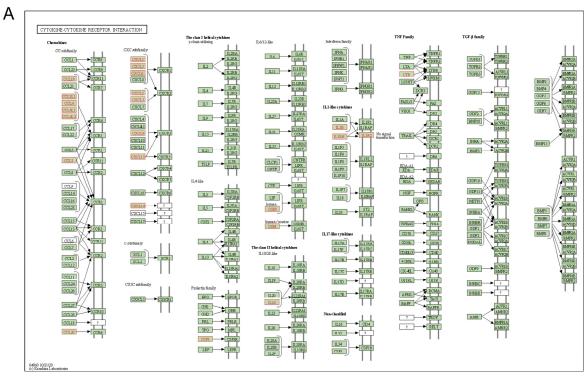
Additional file 12

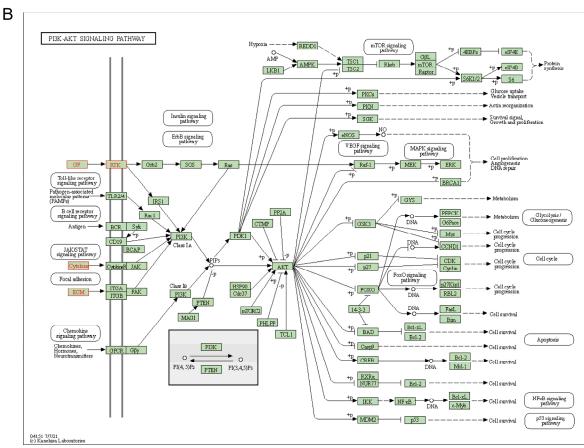
Figure S4. VarElect analysis results of 130 common genes in 454 pseudotime-related genes and 155 (de-duplication) PD-1 resistance related genes DEGs.

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⊕_⊕	» #	▶ Symbol		▶ Description	▶ Type	Matched Phenotypes	Matched Phenotypes Count	▼ Score	Log10(p)	Average Disease Causing Likelihood
•	1	IL1B	9 0	Interleukin 1 Beta	Protein	"colorectal cancer"; caner	2	17.72	2.36	81.8
•	2	MMP9	90	Matrix Metallopeptidase 9	Protein	"colorectal cancer"; caner	2	13.45	2.28	20.3
•	3	CEACAM5	9 0	CEA Cell Adhesion Molecule 5	Protein	"colorectal cancer"; caner	2	12.25	2.25	21.5
•	4	PTGS2	9 0	Prostaglandin- Endoperoxide Synthase 2	Protein	"colorectal cancer"	1	11.32	2.33	66.5
•	5	IL1RN	9 0	Interleukin 1 Receptor Antagonist	Protein	"colorectal cancer"; caner	2	10.84	2.16	79.1
•	6	MUC2	9 0	Mucin 2, Oligomeric Mucus/Gel- Forming	Protein	"colorectal cancer"; caner	2	10.52	2.14	ND
•	7	SPP1	9 0	Secreted Phosphoprotein 1	Protein	"colorectal cancer"; caner	2	9.43	2.01	24.4
•	8	IGFBP3	90	Insulin Like Growth Factor Binding Protein 3	Protein	"colorectal cancer"	1	9.23	2.27	30.3
•	9	KRT19	(3)	Keratin 19	Protein	"colorectal cancer"; caner	2	8.13	1.77	48.7
•	10	REG4	9 0	Regenerating Family Member 4	Protein	"colorectal cancer"; caner	2	<mark>7</mark> .53	1.63	53.7
•	11	STMN1	% 😯	Stathmin 1	Protein	"colorectal cancer"; caner	2	7.36	1.58	60.0
•	12	FN1	(3)	Fibronectin 1	Protein	"colorectal cancer"	1	6.09	1.88	56.9
•	13	MMP12	9 0	Matrix Metallopeptidase 12	Protein	"colorectal cancer"	1	5.7	1.76	ND
•	14	EREG	(3)	Epiregulin	Protein	"colorectal cancer"	1	5.69	1.76	67.0
•	15	ENG	9 0	Endoglin	Protein	"colorectal cancer"	1	5.5	1.69	58.1
•	16	LGALS3	(3)	Galectin 3	Protein	"colorectal cancer"	1	5.48	1.69	22.7
•	17	F3	9 0	Coagulation Factor III, Tissue Factor	Protein	"colorectal cancer"	1	5.24	1.59	45.4
•	18	CXCL1	9 0	C-X-C Motif Chemokine Ligand 1	Protein	"colorectal cancer"	1	5.21	1.58	60.0
•	19	S100A9	9 6	S100 Calcium Binding Protein A9	Protein	"colorectal cancer"	1	5.15	1.56	67.3
•	20	CCL20	90	C-C Motif Chemokine Ligand 20	Protein	"colorectal cancer"	1	5.12	1.55	64.2

Additional file 12

Figure S5. The cytokine–cytokine receptor interaction and the MAPK and PI3K-Akt signaling pathway maps of IL-1β and MMP9.





Additional file 12

Figure S6. Construction of stable CT26 cell line overexpressing IL-1β.

