

**Supplemental Table 1. Information of immunohistochemistry used in this study**

Target protein	Primary antibody	Clone	Cat No.	Regulatory status	Stainer	Dilution	Company
CD3	CONFIRM anti-CD3 rabbit monoclonal antibody	2GV6	790-4341	IVD	BenchMark XT	RTU	Roche, Basel, Switzerland
CD8	CONFIRM anti-CD8 rabbit monoclonal antibody	SP57	790-4460	IVD	BenchMark XT	RTU	Roche, Basel, Switzerland
CD68	DAKO anti-CD68 mouse monoclonal antibody	KP1	M0814	IVD	BenchMark XT	1:2000	Agilent Technologies, Santa Clara, CA, USA
CD163	Cell Marque anti-CD163 mouse monoclonal antibody	MRQ-26	163M-15	IVD	BOND-III	1:200	MilliporeSigma, Burlington, MA, USA
FoxP3	Anti-FOXP3 mouse monoclonal antibody	236A/E7	ab20034	RUO	BenchMark XT	1:100	Abcam, Cambridge, UK
PD-L1	Anti-PD-L1 rabbit monoclonal antibody	E1L3N	#13684	RUO	BenchMark XT	1:100	Cell Signaling Technology, Danvers, MA, USA
MLH1	VENTANA anti-MLH1 mouse monoclonal antibody	M1	790-4535	IVD	BenchMark XT	RTU	Roche, Basel, Switzerland
MSH2	Invitrogen anti-MSH2 mouse monoclonal antibody	FE11	18-2343	IVD	BOND-III	1:50	Thermo Fisher Scientific, Waltham, MA, USA
MSH6	Cell Marque anti-MSH6 mouse monoclonal antibody	44	287M-16	IVD	BenchMark XT	1:50	MilliporeSigma, Burlington, MA, USA
PMS2	Cell Marque anti-PMS2 mouse monoclonal antibody	MRQ-28	288M-14	IVD	BOND-III	1:50	MilliporeSigma, Burlington, MA, USA
HLA class I	Anti-HLA Class 1-ABC mouse monoclonal antibody	EMR8-5	ab70328	RUO	BenchMark XT	1:500	Abcam, Cambridge, UK
B2M (beta-2-microglobulin)	Anti-B2M rabbit polyclonal antibody	HPA006361	B114528	RUO	BenchMark XT	1:1000	Atlas Antibodies, Bromma, Sweden
CD200	Human/Mouse/Rat CD200 goat polyclonal antibody	AF2724	AF2724	RUO	BenchMark XT	1:100	R&D systems, Minneapolis, MN, USA

Abbreviations: IVD, in vitro diagnostics; RUO, research use only; RTU, ready-to-use