

Table S2. List of panel specific details

	PAb-1	Dilution	HIER*	2 ^o Ab-1	Dilution	Fab	Dilution	PAb-2	Dilution	2 ^o Ab-2	Dilution
Panel I	FoxP3	1:100	Tris-Urea (pH 9.5)	AF488	1:200	Fab	1:25	Blimp1	1:100	AF555	1:200
								CD4	1:100	AF647	1:200
Panel II-1	Tbet	1:50	Sodium Citrate (pH 6.0)	AF488	1:200						
	GATA3	1:50		AF555	1:200						
Panel II-2	IL-17	1:50	Sodium Citrate (pH 6.0)	AF488	1:200						
Panel III	CD8	1:50	Tris-Urea (pH 9.5)	AF555	1:200						
	Granzyme	1:100		AF488	1:200						
Panel IV	Langerin	1:100	Tris-Urea (pH 9.5)	AF488	1:200	Fab	1:25	Fascin	1:800	AF555	1:200
								TSLP	1:200	AF647	1:200
Panel V	Clec9A	1:50	Tris-Urea (pH 9.5)	AF488	1:200						
	DC-LAMP	1:25		AF555	1:200						
	CD11c	1:100		AF647	1:200						
Panel VI	HMGB1	1:100	Tris-Urea (pH 9.5)	AF488	1:200	Fab	1:25	CD138	1:500	AF555	1:200
								CD32B	1:200	AF647	1:200
Panel VII	IDO1	1:100	Tris-Urea (pH 9.5)	AF488	1:200	Fab	1:25	pan-specific E4	1:300	AF555	1:200
								PD-L1	1:100	AF647	1:200

*HIER: Heat-Induced Epitope Retrieval