antibody	species	application	validation
Anti CD3	Human	Immunofluorescence	Ryschich, E., et al., Expression of HLA class I/II antigens and T cell immune response in human neuroendocrine tumors of the pancreas. Tissue Antigens, 2003. 62(1): p. 48-54.
Anti IL9	Human	Immunofluorescence	1:50
Anti CD4	Human	Immunofluorescence	https://www.biolegend.com/en-us/products/purified-anti-human-cd4-antibody-3650
Anti PU.1	Human	Immunofluorescence, FACS	1:200
Anti CD3	Mouse	Immunofluorescence	https://www.biolegend.com/en-us/products/purified-anti-mouse-cd3epsilon-antibody-28
Anti IL-9 R	Mouse	Immunofluorescence	Gerlach, K., et al., TH9 cells that express the transcription factor PU.1 drive T cell-mediated colitis via IL-9 receptor signaling in intestinal epithelial cells. Nat Immunol, 2014. 15(7): p. 676-86.
Anti Ki67	Mouse	Immunofluorescence	https://www.agilent.com/en/product/immunohistochemistry/antibodies-controls/primary-antibodies/ki-67-antigen-(dako-omnis)-76239
Anti IL-9	Mouse	Immonufluorescence	http://www.bdbiosciences.com/eu/applications/research/t-cell-immunology/th-9-cells/intracellular-markers/cytokines-and-chemokines/mouse/purified-nale-hamster-anti-mouse-il-9-d9302c12/p/554472
Anti CD4	Mouse	Immunofluorescence	Yang, T., et al., Shifts in the Gut Microbiota Composition Due to Depleted Bone Marrow Beta Adrenergic Signaling Are Associated with Suppressed Inflammatory Transcriptional Networks in the Mouse Colon. Front Physiol, 2017. 8: p. 220.
Anti IL-6	Mouse	Immunofluorescence	Galie, M., et al., Mammary carcinoma provides highly tumourigenic and invasive reactive stromal cells. Carcinogenesis, 2005. 26(11): p. 1868-78.
anti-mCD4$^{PEC\gamma7}$	Mouse	FACS	1:800
anti-mCD19^{APC}	Mouse	FACS	1:800
anti mCD8^{PE}	Mouse	FACS	1:800
anti-mEpCAM^{APC}	Mouse	FACS	Glal, D., et al., ATF3 Sustains IL-22-Induced STAT3 Phosphorylation to Maintain Mucosal Immunity Through Inhibiting Phosphatases. Front Immunol, 2018. 9: p. 2522.
anti-mEpCAM^{PE}	Mouse	FACS	1:200
anti-hCD3^{APC}	Human	FACS	1:20
anti-mGATA3^{APC}	Human/Mouse	FACS	1:20
anti-mFoxP3^{APC}	Human/Mouse	FACS	1:200
anti-mRORgt^{APC}	Human/Mouse	FACS	Moretti, S., et al., A mast cell-ILC2-Th9 pathway promotes lung inflammation in cystic fibrosis. Nat Commun, 2017. 8: p. 14017.
anti-mTbet^{APC}	Human/Mouse	FACS	https://www.labome.com/product/Miltenyi-Biotec/130-098-607.html
anti-mIL-6^{PE}	Mouse	FACS	1:800
anti-mIL-9^{PE}	Mouse	FACS	1:800
anti-hIL-9^{PE}	Human	FACS	https://www.biolegend.com/de-at/products/pe-anti-human-il-9-antibody-1974
anti-mpSTAT3^{APC}	Mouse /Human	FACS	1:100
anti SOCS3	Mouse	WB	1:1000
anti Claudin2	Mouse	WB	0.5-2 µg/mL
anti Claudin3	Mouse	WB	Kern, M., et al., Altered Cytokine Expression and Barrier Properties after In Vitro Infection of Porcine Epithelial Cells with Enterotoxigenic Escherichia coli and Probiotic Enterococcus faecium. Mediators Inflamm, 2017. 2017: p. 2748192.

Supplementary Fig. 4