

Table SI. Antibody list for flow cytometry.

Antibody	Fluorochrome	Catalog number	Dilution	Supplier
CD3	V450	560365	1:10	BD Bioscience
CD4	APC-Cy7	557871	1:10	BD Bioscience
CD5	PerCP-Cy5.5	341089	1:2.5	BD Bioscience
CD10	PE-Cy7	341092	1:10	BD Bioscience
CD19	APC	555415	1:2.5	BD Bioscience
CD19	APC-R700	564977	1:10	BD Bioscience
CD20	APC	340941	1:10	BD Bioscience
CD22	BV605	740396	1:20	BD Bioscience
CD23	APC	558690	1:2.5	BD Bioscience
CD25	PE	567214	1:20	BD Bioscience
CD25	PerCP-Cy5.5	560503	1:10	BD Bioscience
CD27	APC-R700	565116	1:10	BD Bioscience
CD38	BV605	740401	1:20	BD Bioscience
CD45	V500-C	647449	1:10	BD Bioscience
CD56	FITC	340410	1:2.5	BD Bioscience
CD79b	PE	557931	1:2.5	BD Bioscience
CD103	BV421	563882	1:10	BD Bioscience
CD138	V450	562098	1:10	BD Bioscience
CD200	PerCP-Cy5.5	562124	1:10	BD Bioscience
cλ	PE	652812	1:2.5	BD Bioscience
cκ	FITC	652813	1:2.5	BD Bioscience

FMC-7	FITC	340919	1:2.5	BD Bioscience
HLA-DR	APC-Cy7	335796	1:10	BD Bioscience

For immunophenotypic characterization of lymphoma cells, flow cytometric analysis was performed using a panel of fluorochrome-conjugated antibodies. All antibodies were validated for specificity and titrated to optimal concentrations before use. Fluorochromes were selected to minimize spectral overlap, with clone and catalog numbers provided per manufacturer instructions. Antibodies were stored at 2-8°C in the dark and used before expiration.  $\kappa$ , cytoplasmic  $\kappa$  light chain;  $\lambda$ , cytoplasmic  $\lambda$  light chain; HLA-DR, human leukocyte antigen-DR isotype.