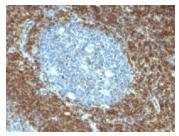
Hematologic Cancer Markers



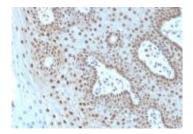


By 2020, nearly 412,000 people will be diagnosed with some form of leukemia and nearly 537,000 will be diagnosed with lymphoma worldwide. Leukemia can be categorized based on which type of white blood cell is involved (lymphocytes or myeloid cells) as well as whether the illness is chronic, developing slowly and persisting for a long time, or acute, developing very quickly. Lymphoma is a type of cancer that originates in the part of the body's immune system known as the lymphatic system, which includes the lymph nodes and lymphoid tissues.

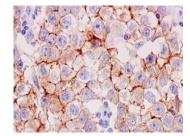
GLOBOCAN & Memorial Sloan Kettering Cancer Center



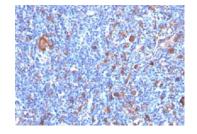
FFPE human tonsil stained with anti-Bcl-2 [BCL2/796]



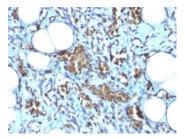
FFPE human cervical ca stained with anti-c-Myc [MYC275+909]



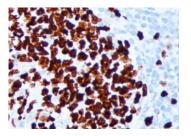
FFPE human seminoma stained with anti-CD117 [YR145]



FFPE human Hodgkin's lymphoma stained with anti-Fascin [FSCN1/417]



FFPE human angiosarcoma stained with CD235a [GYPA/280]



FFPE human tonsil stained with anti-Ki67 [MIB-1]

Name	Cat. No.	Application
ALK/p80 [ALK1/1031]	MC0607	- Specific marker for anaplastic lymphomas
ALK/p80 [EP302]	RM0350	
α-1-Antichymotrypsin	MC0141	Useful in the identification of neoplastic myeloid cells within
[AACT/1451]	1010141	extramedullary tissues such as acute myeloid leukemia
α-1-Antitrypsin [AAT/1378]	MC0142	Useful in identification of benign and malignant hepatic tumors and yolk sac carcinomas
		Specific to hairy cell leukemia that can be used to differentiate this
Annexin A1 Polyclonal	RC0315	disease from other B-cell lymphomas
Bcl-10 [SPM520]	MC0612	Useful tool for the sub-classification of lymphomas
Bcl-2 [BCL2/796]	MC0617	Used to identify lymphoma, Burkitt's lymphoma, Follicular lymphoma,
Bcl-2 [EP36]	RM0006	Acute Myeloid Leukemia Adult
Bcl-6 [EP278]	RM0280	For classification of diffuse large B-cell lymphomas, follicular
Bcl-6 [GI191E/A8]	MC0130	lymphomas and Burkitt's lymphoma/leukemia
Bcl-6 [PG-B6P]	MC0619	Tymphomas and Burkters Tymphoma, leakenna
Bcl-x [2H12]	MC0620	A high level found in Reed Sternberg cells in Hodgkin's disease.
Bcl-x [EP94]	RM0007	Overexpression observed in primary central nervous system lymphomas that occur in immunosuppressed patients
		Used as an aid in the identification of B-cells in germinal centers,
BOB.1 [EP114]	RM0010	mantle cells, and differentiation of lymphomas
CD10 [56C6]	MC0277	Used to identify Burkitt's lymphoma/leukemia, follicular lymphoma
CD10 [SP67]	RM0224	(except grade III), precursor B-cell lymphoblastic leukemia/ lymphoma and renal cell carcinoma of the clear cell type
CD103 [EP206]	RM0019	Present on all enteropathy-type T-cell lymphomas. Additionally, CD103 has been a useful marker for hairy cell leukemia
CD117/c-Kit [EP10]	RM0067	
CD117/c-Kit [YR145]	RM0226	A marker for Mast cell and gastrointestinal stroma tumor
CD11c [EP157]	RM0021	May aid in identification of lesions with histiocytic origin. It may also
CD11c [ITGAX/1284]	MC0150	been used as a marker for hairy cell leukemia
CD123/IL3RA [7G3]	MC0509	Useful in diagnosis of Kikuchi disease, hyaline vascular type of
		Castleman disease, lupus, and primary cutaneous marginal zone B-cell
		lymphoma
CD13 [APN/514]	MC0204	Used as a myeloid marker and identify AML subtype M0 acute
CD13 [EP117]	RM0022	lymphoid leukemia (ALL); a sensitive but not entirely specific marker for ALK+ anaplastic large cell lymphomas (ALCLs)

Name	Cat. No.	Application
CD138 [B-A38]	MC0510	Used to identify differentiated plasma cells, multiple myeloma, and
CD138 [EP201]	RM0023	subclassification of diffuse large B-cell
CD14 [EP128]	RM0024	Used as a differentiation marker for monocytes/macrophages, labels Langerhans' cells and dendritic cells
CD15 [Carb-3]	MC0287	Used to identify Chronic Myelogenous Leukemia, mononuclear
CD15 [EP273]	RM0282	Hodgkin's cells and Reed-Sternberg cells in Hodgkin's lymphoma
CD16 [SP175]	RM0228	Useful to differentiate hepatosplenic gamma delta T-cell lymphoma and gamma delta T-cell large granular lymphocyte leukemia from other peripheral T-cell lymphomas, such as mucosal and cutaneous gamma delta T-cell lymphoma
CD163 [EP324]	RM0027	Might be used for identifying tumors of monocytic origin
CD19 [SP110]	RM0230	A pan B cell marker expressed in a wide range of maturational stages including pre-B cells, found in the majority of B cell–derived malignancies
CD1a [EP80]	RM0029	Used for identification of Langerhans Cell Histiocytosis, thymoma,
CD1a [O10]	MC0278	precursor T-lymphoblastic leukemia/lymphoma
CD2 [EP222]	RM0283	A pan T-cell marker, Useful for identification of precursor and mature T-cell lymphomas. Aberrant loss of CD2 in T-cell lymphomas may help to distinguish them from reactive T-cell proliferations
CD20 (B Cell) [L26]	MC0056	
CD20 (B Cell) [EP7]	RM0030	Used to identify B lymphocyte
CD21 [EP64]	RM0032	Used to identify follicular lymphoma, follicular dendritic cells, mature B cells and angioimmunoblastic T-cell lymphoma
CD22 [SP104]	RM0231	Expressed in B lymphocytes and hairy cell leukemia
CD23 [EP75]	RM0033	Used to identify both normal B cells and malignant lympho- mas such
CD23 [HD50]	MC0158	as B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma
CD235a [GYPA/280]	MC0651	strongly labels normal erythroid cells at all stages of differentiation from the erythroblast to the mature red cell and does not react with glycophorin B
CD25 [EP218]	RM0034	Used to distinguish neoplastic mast cell aggregates from reactive proliferations. It is a minor criterion for the diagnosis of bone marrow involvement in systemic mastocytosis (SM)
CD3 [EP41]	RM0035	Used to identify T- and NK-cell lymphomas and mycosis fungoides
CD3 Delta [EP177]	RM0041	

Name	Cat. No.	Application
CD30 [Ber-H2]	MC0314	Used to identify Reed-Sternberg cells in Hodgkin's lymphoma and
CD30 [EP154]	RM0036	anaplastic large cell lymphoma
CD31 (PECAM-1) [EP78]	RM0037	Used for identification of vascular and lymphatic vessels and tumors of
CD31 (PECAM-1) [JC70A]	MC0514	vascular origin
CD33 [HIM3-4]	MC0205	Useful for acute myeloid leukemia, minimally differentiated (AML-M0)
CD33 [PWS44]	MC0515	and acute monocytic leukemia (AML-M5), myeloid sarcoma
CD34 [EP88]	RM0038	Used to identify vascular and lymphatic vessels and tumors of vascular
CD34 [QBEnd/10]	MC0066	origin
CD35 [E11]	MC0663	Abnormal expression associated with follicular dendritic cell tumor,
CD35 [EP197]	RM0039	sarcoidosis, gallbladder carcinomas, mesangiocapillary glomerulonephritis, and systemic lupus erythematosus
CD38 [EP135]	RM0040	Helpful in the identification of plasma cells and tumors with plasmablastic differentiation
CD4 [EP204]	RM0042	Used to identify thymocytes, T lymphocyte, anaplastic large cell lymphoma and mycosis fungoides
CD43 [DF-T1]	MC0516	Used for identification of low-grade B-cell lymphoma, peripheral T-cell lymphoma and myeloid disorders
CD44 (HCAM) [156- 3C11]	MC0666	Expressed on approximately 90% of lymphocytes, monocytes, granulocytes, and, in lower amounts on thymocytes, fibroblasts, and
CD44 (HCAM) [EP44]	RM0044	erythrocytes
CD45 [2B11&PD7/26]	MC0316	Licod to identify tymers of hypobold origin
CD45 [EP68]	RM0045	Used to identify tumors of lymphoid origin
CD45RA [111-1C5]	MC0985	Expressed on 40-50% of peripheral CD4+ T-cells, 50% of peripheral
CD45RA [4KB5]	MC0517	CD8+ T-cells, B-cells, and leukemic B-cell lines
CD45RB [BRA-11G]	MC0678	Used to identify tumors of lymphoid origin
CD45RO [UCHL-1]	MC0078	Useful marker for reactive T cells and T-cell neoplasms
CD5 [C5/473&/54/F6]	MC0681	Used to identify B-cell chronic lymphocytic leukemia/ small
CD5 [EP77]	RM0047	lymphocytic lymphoma, mantle cell lymphoma, and T-cell lymphoma and leukemia
CD56/NCAM [123A8]	MC0686	Used to identify natural killer (NK) cells, NK-like T cells, small cell
CD56/NCAM [123C3]	MC0290	carcinoma of the lung and carcinoid tumor
CD57/B3GAT1 [NK-1]	MC0519	Used to identify lymphocyte-predominant HL, T-cell large granular lymphocyte disorder, oligodendroglioma and neuroendocrine tumor
CD61 [2f2]	MC0520	Used for diagnosis of megakaryoblastic leukemia and absence of
CD61 [Y2/51]	MC0137	Gpllb/Illa in Glanzmann's thrombastenia

Name	Cat. No.	Application
CD68 [KP1]	MC0084	Used to identify macrophages, M4 and M5 types of acute myeloid leukemia (+), histiocytic sarcoma (+), M1 acute myeloid leukemia (-)
CD7 [EP132]	RM0050	Used for identification of T lymphocyte, Acute Lymphoblastic Leukemia
CD71 [EP232]	RM0284	Useful in identifying erythroid precursors
CD74 [EP167]	RM0051	A marker for distinguishing atypical fibroxanthoma from malignant
CD74 [LN-2]	MC0701	fibrous histiocytoma and distinguishing leiomyosarcoma from leiomyoma
CD79a [EP82]	RM0052	Light to identify D hyperboards and D calls during all stages of
CD79a [JCB117]	MC0319	Used to identify B lymphocyte and B cells during all stages of differentiation
CD79a [SP18]	RM0238	
CD8 [EP334]	RM0360	Used to identify cutaneous T-Cell lymphoma, mycosis fungoides
CD8 [SP16]	RM0239	Osed to identify cutaneous 1-cen lymphoma, mycosis lungoides
c-Myc [EP121]	RM0070	A marker for Burkitt lymphoma, and diffused large B-cell lymphoma
c-Myc [MYC275+909]	MC0134	
Cyclin D1 [DCS-6]	MC0732	Used to identify mantle cell lymphoma (+), and B-cell chronic
Cyclin D1 [EP12]	RM0071	lymphocytic leukemia/small lymphocytic lymphoma (-)
CK20 [EP23]	RM0080	A well-established marker for colon epithelium, may be used for
CK20 [KRT20/1993]	MC0174	detecting circulating tumor cells (CTCs) in patients with metastatic
CK20 [Ks20.8]	MC0114	colorectal cancer
CK7 [EP16]	RM0085	A marker for lung, breast and urothelial cancer, may be used for
CK7 [OV-TL12/30]	MC0754	detecting circulating tumor cells (CTCs) in patients with metastasis
Factor VIII Polyclonal	RC0325	Reacts specifically with the endothelial cells of normal, reactive, and neoplastic blood and lymphatic vessels, endocardium, platelets, and megakaryocytes
Factor VIII RA Polyclonal	RC0284	a sensitive marker of benign blood vessels, and aid for classification of tumors derived from megakaryocytes
Fascin [EP116]	RM0095	Highly sensitive for staining Reed-Sternberg cells making it an excellent
Fascin [FSCN/417]	MC0787	marker for classic Hodgkin's lymphoma
FOXP1 [EP137]	RM0096	Overexpression in a subset of diffuse large B-cell lymphoma (DLBCL), helpful in the subclassification of DLBCL
Galectin-3 [B2C10]	MC0132	Used to differentiate between benign and malignant thyroid neoplasms in both histologic sections and fine needle aspiration biopsy material, and identifying anaplastic large cell lymphoma

Name	Cat. No.	Application
Glycophorin A [EP213]	RM0101	Useful in identifying cells of the erythroid lineage
Granzyme B [EP230]	RM0102	Useful in the identification of natural killer/T-cell lymphoma, and
Granzyme B Polyclonal	RC0406	anaplastic large cell lymphoma
Hairy Cell Leukemia [DBA.44]	MC0135	Combining with TRAcP, it is a good tool to detect HCL
Hemoglobin Alpha [EP124]	RM0103	A useful marker for erythroid cells
hGAL (GCET2) [EP316]	RM0373	A useful marker for diffuse large B-cell lymphoma (DLBCL) and several
HGAL/GCET2 Polyclonal	RC0301	germinal center (GC)-like lymphoma cell lines, normal GC lymphocytes and GC-derived malignancies
IgA [EP170]	RM0110	Used to identify plasma cells and related lymphoid cells containing IgA,
IgA [IA761]	MC0811	and for the classification of B-cell neoplasias
IgD [EP173]	RM0111	Used to identify mantle cell lymphoma, splenic marginal zone lymphoma, B-cell chronic lymphocytic/leukemia/small lymphocytic lymphoma and rare subsets of multiple myeloma
lgG [B33/20]	MC0812	Used to identify plasma cells, lymphoid cells and IgG plasma cell neoplasia containing IgG
IgM [DA4-4]	MC0815	Used to identify plasma cells and lymphoid cells containing IgM, classification of IgM subtype for B-cell neoplasia
Kappa [EP171]	RM0114	Used to identify plasma cells and lymphoid cells containing kappa light
Kappa [HP6053]	MC0338	chains, and classification of kappa light chain restriction for monoclonal gammopathies and amyloidosis
Ki67 [EP5]	RM0116	
Ki67 [MIB-1]	MC0185	Used for identification of Burkitt's lymphoma/leukemia
Ki67 [SP6]	RM0255	
Lambda [EP172]	RM0117	Used to identify plasma cells and lymphoid cells containing lambda
Lambda [HP6054]	MC0341	light chains, and for classification of lambda light chain restriction for monoclonal gammopathies and amyloidosis
Langerin [12D6]	MC0544	A panel of langerin, CD1a, CD21, CD23, CD35, S100 may distinct Langerhans cell histiocytosis, histiocytic sarcoma, interdigitating dendritic cell sarcoma, follicular dendritic cell sarcoma, disseminated juvenile xanthogranuloma, and Rosai-Dorfman disease
LEF1 [EP310]	RM0381	May be an aid for differentiation of chronic lymphocytic
LEF1 Polyclonal	RC0298	leukemia/small lymphocytic lymphoma from other small B cell lymphomas

Name	Cat. No.	Application
LMO2 [SP51]	RM0256	A tool in the identification of lymphomas of B-cell origin
Lysozyme [EP134]	RM0121	
Lysozyme Polyclonal	RC0185	Used to identify histiocytic neoplasias and myeloid leukemias
Macrophage L1 Pro [MAC387]	MC0073	A marker for neutrophils, monocytes, macrophages, and squamous mucosal epithelia to identify macrophages in tissue sections
Macrophage Spec [LN-5]	MC0834	Can be an important tool for the study of malignant and benign histiocytic lesions
Mesothelial C [HBME-1]	MC0343	
Mesothelin [EP140]	RM0127	
Mesothelin [MSLN/2131]	MC0207	 Used to identify epithelial mesotheliomas
MUM1 [EP190]	RM0135	Used to identify epithelial mesotheliomas
MUM1 [MRQ-43]	RM0258	Osed to identify epithelial mesotilenomas
MPO [EP151]	RM0137	Useful in identifying myeloid leukemias and granulocytic sarcoma
MPO Polyclonal	RC0291	Oserul in identifying myelold leukemias and granulocytic sarcoma
OCT2 [EP115]	RM0147	A marker for various B cell lymphomas with strong expression in germinal center-derived lymphomas, lymphocyte predominance HLs
PAX5 [A11]	MC0203	
PAX5 [EP156]	RM0156	Used to identify epithelial mesotheliomas
PD-1 [EP239]	RM0392	A useful marker for angieimmunghlastic T call lumphoma
PD-1 [PDCD1/922]	MC0909	A useful marker for angioimmunoblastic T-cell lymphoma
Perforin [E-5]	MC0980	A specific marker of functionally active cytotoxic T-lymphocytes (CTLs)
Perforin Polyclonal	RC0418	and natural killer (NK) cells
SOX11 [MRQ-58]	MC0572	Expressed in most mantle cell lymphomas (MCL) and, in particular, in
SOX11 Polyclonal	RC0300	all cyclin D1 negative MCLs
Spectrin [EP251]	RM0302	A superior marker to glycophorin for the identification of erythroid precursors
T-bet/TBX21 [EP263]	RM0304	A useful new marker for Hodgkin's lymphoma and identification of
T-bet/TBX21 [MD40R]	RM0343	hairy cell leukemia (HCL).
TCL1 [EP105]	RM0182	Useful in identifying B-cell lymphomas including follicular lymphoma and Burkitt lymphoma
TdT [EP266]	RM0305	Used to identify precursor acute lymphoblastic leukemia and thymoma
Top II alpha [EP93]	RM0188	 Used to identify proliferating cells in Hodgkin's Lymphoma
Top II alpha [Ki-S1]	MC0575	

Hematologic Cancer Markers

Name	Cat. No.	Application
TRAcP/TRAP5 [9C5]	MC0385	Utility in providing adjunctive information for the identification of hairy cell leukemia
TF PU.1 [EP18]	RM0190	A marker for B lymphocytes in germinal center and mantle B cells, labels many types of B-cell lymphomas including mantle cell lymphoma, but is not expressed in classical Hodgkin lymphoma (cHL)
ZAP70 [2F3.2]	MC0372	Used to identify ZAP-70 in a subset of B-cell chronic lymphocytic
ZAP70 [EP52]	RM0197	leukemias/small lymphocytic lymphoma

Research Use Only