

悪性リンパ腫の免疫組織化学

各種リンパ球マーカーと抗原賦活処理

DakoCytmation, CO, LTD

BioMedical Science Department

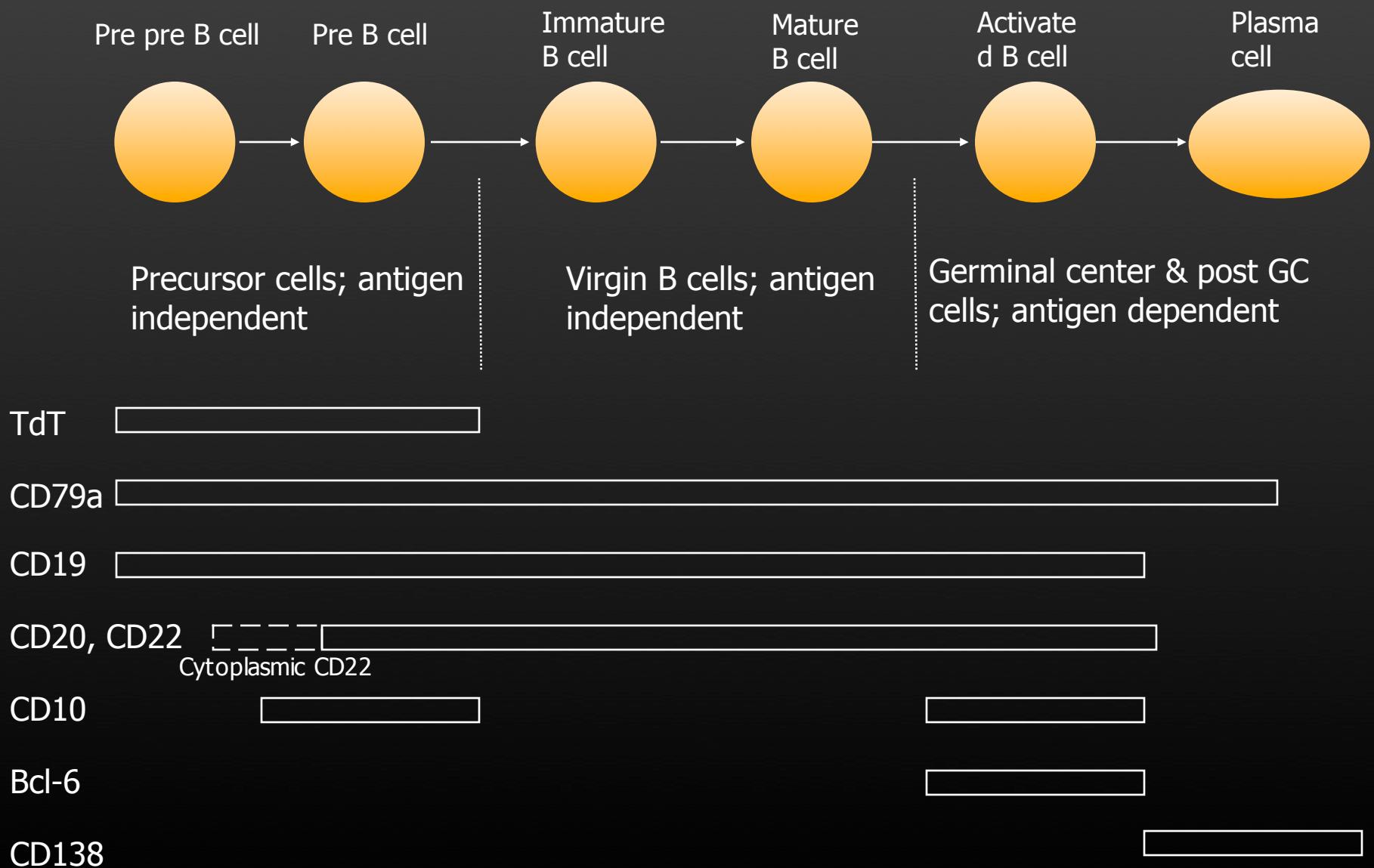
谷 洋一

Lymphoma ?

	LCA	Cytokeratin	S100 protein
Lymphoma	+	-	-
Carcinoma	-	+	-/+
Melanoma	-	-	+
Sarcoma	-	-	-/+

LCA-negative lymphoma:

Anaplastic large cell lymphoma and lymphoblastic lymphoma



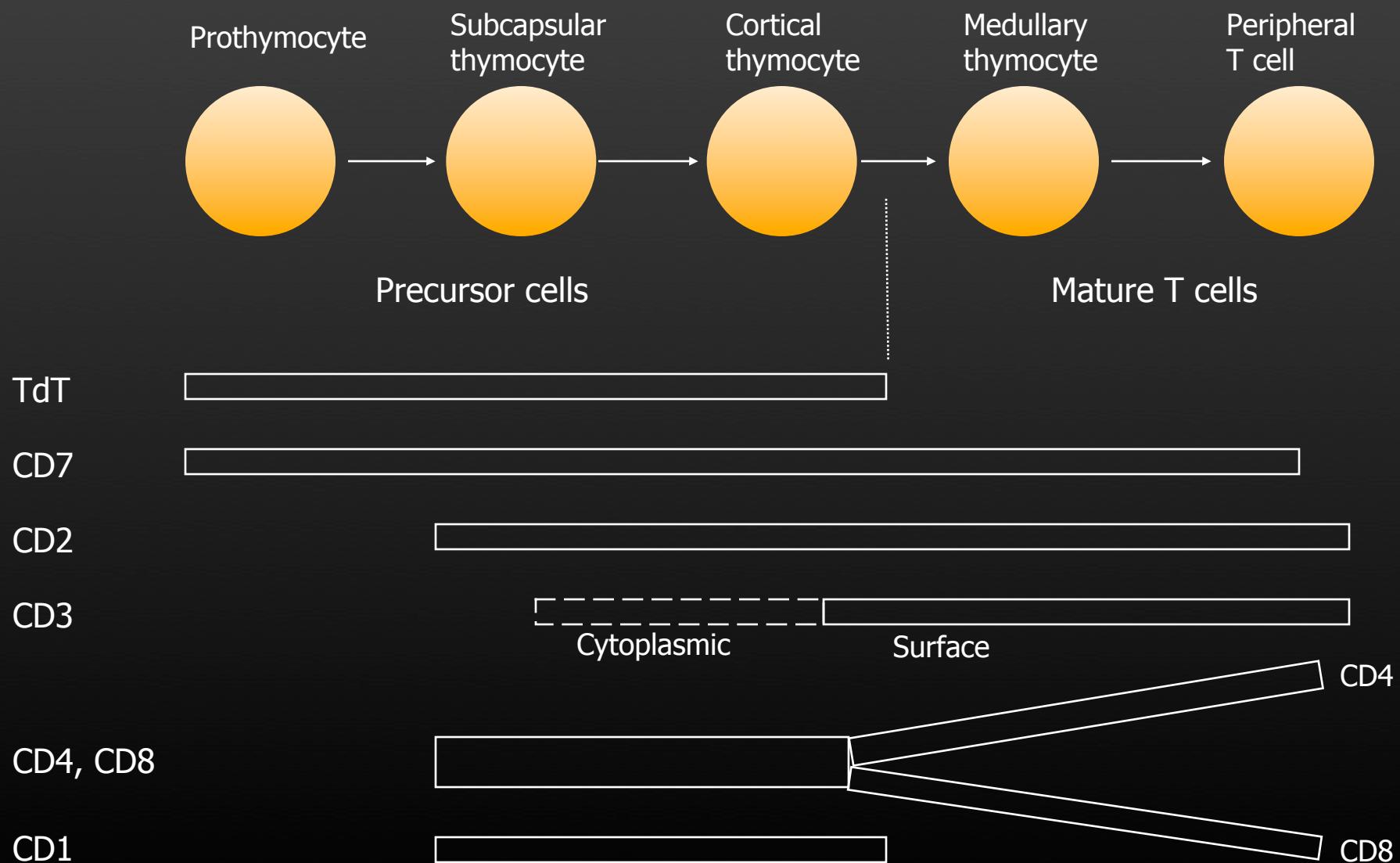
B Cell lineage markers

CD20 (L26)

- Positive in B cell lymphomas
- Negative in plasmacytomas and plasmablastic lymphomas
- B cell lymphoblastic lymphoma may be negative
- Heat-induced epitope retrieval causes undesirable nuclear staining.

CD79a (JCB117)

- Positive in B cell lymphomas (97%)
- Positive in plasmacytomas (50%)
- Positive in B cell lymphoblastic lymphomas
- May be positive in some T cell lymphoblastic lymphoma/leukemias (6%)



T Cell lineage markers

CD3 (Cytoplasmic)

(**Polyclonal Ab against CD3 ε ,monoclonal Ab, PS1, F7.2.38**)

- Highly sensitive and specific for T lineage
- Positive in T / NK cell lymphomas (90% >)

CD45RO (UCHL1)

- Some T cell lymphomas are CD3 -/CD45RO+
- May be positive in myeloid cells and their tumors
- Heat-induced epitope retrieval causes undesirable nuclear staining

Immunophenotyping of B or T cell lymphomas

Antibody	Precursor B cell	Mature B cell	Precursor T cell	Mature T cell
CD20	-(-+)	+	-	-
CD79a	+	+	-(-+)	-
CD3	-	-	+	+
CD45RO	-(-+)	-	-(-+)	+
CD7	-	-	+	+
CD1a	-	-	+	-
TdT	+	-	+	-

Target Retrieval Methods for Major Primary Antibodies

CD20	(L26)	no treatment	
CD79a	(JCB117)	CB or TE buffer	(95°C, 20 min)
bcl-2	(124)	TE buffer	(95°C, 20 min)
Cyclin D1 min)	(DCS-6)	TE buffer	(95°C, 20 – 40
CD5	(4C7)	TE buffer	(95°C, 20 min)
CD3	(Polyclonal)		
CD3	(PC3/188A)	TE buffer	(95°C, 20 min)
CD45RO	(UCHL1)	no treatment	
CD7	(CBC.37)	S1700	(95°C, 20 min)
CD4	(IF6)	TE buffer	(95°C, 20 min)
CD8	(C8/144B)	TE buffer	(95°C, 20 min)
CD56	(1B6)	TE buffer	(95°C, 20 min)
Granzyme B	(GrB-7)	TE buffer	(95°C, 20 min)
CD15	(C3D-1)	no treatment	
CD30	(Ber-H2)	TE buffer	(95°C, 20 min)
Fascin min)	(55K-2)	CB or TE buffer	(95°C, 20 – 40
ALK-1	(ALK1)	TE buffer	(95°C, 20 – 40 min)

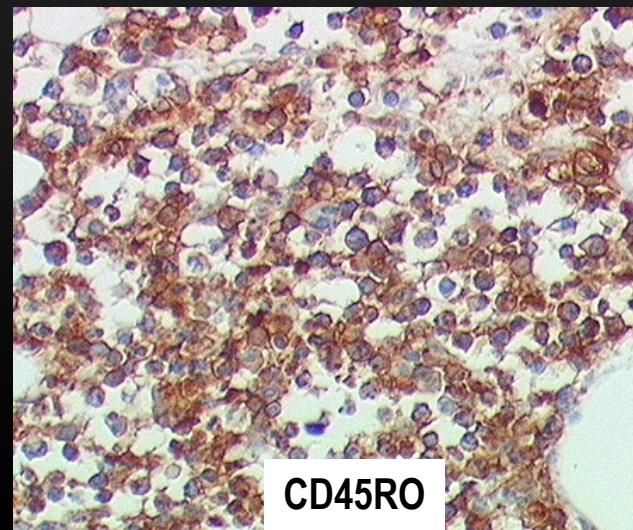
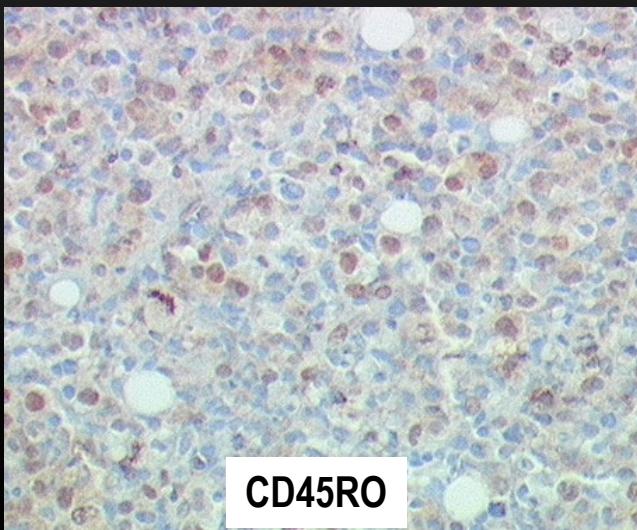
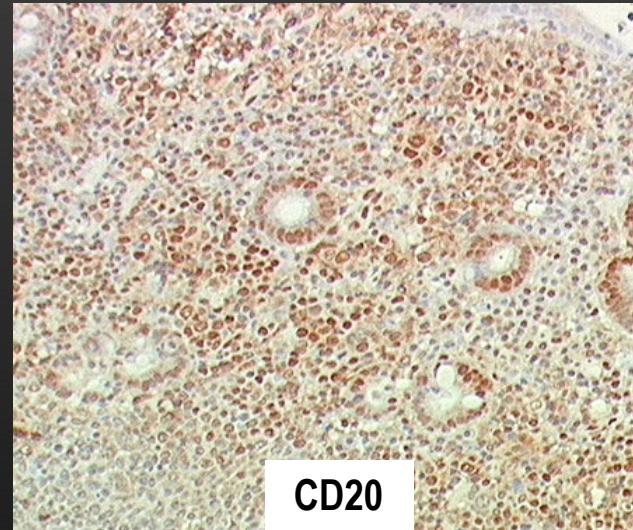
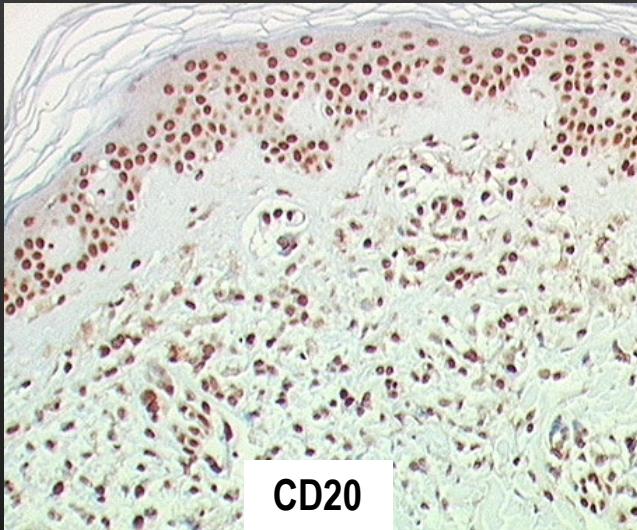
CB: Citrate
Buffer(pH6.0)

TE: Tris-EDTA(pH9.0)

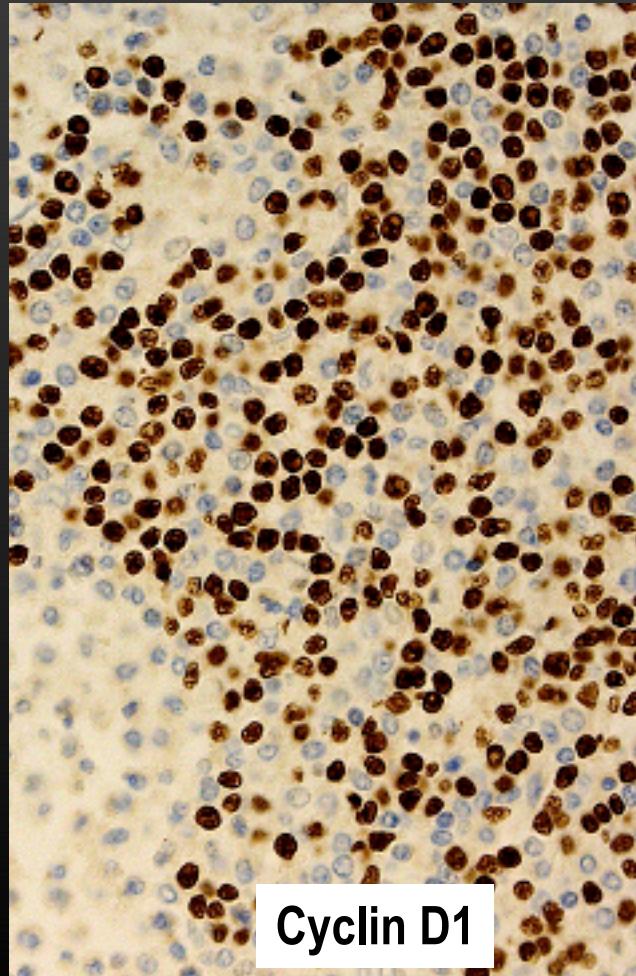
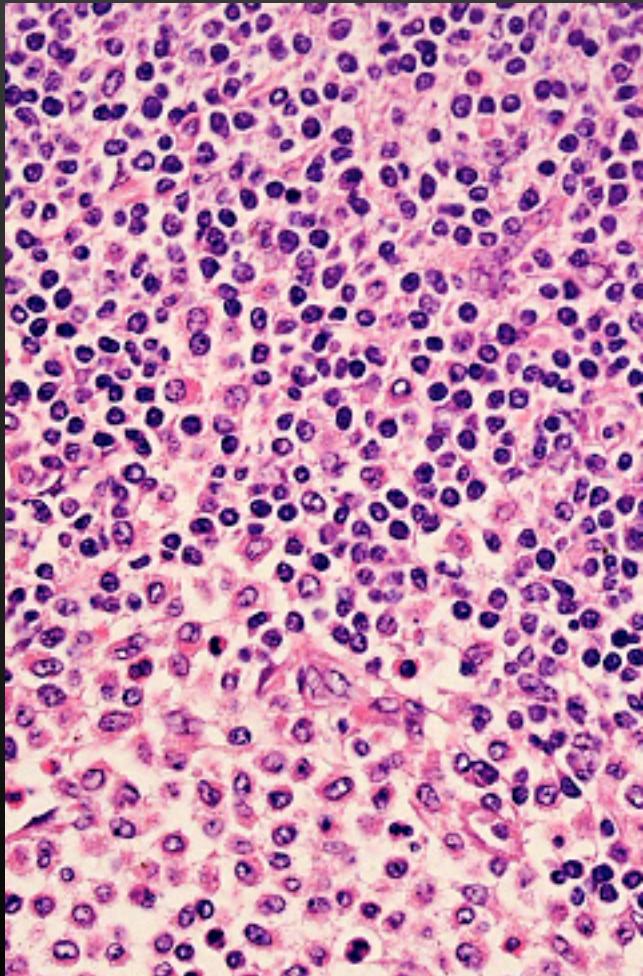
S1700: DAKO S1700

CD20(L26) and CD45RO(UCHL1)

Heat-induced epitope retrieval causes undesirable nuclear staining

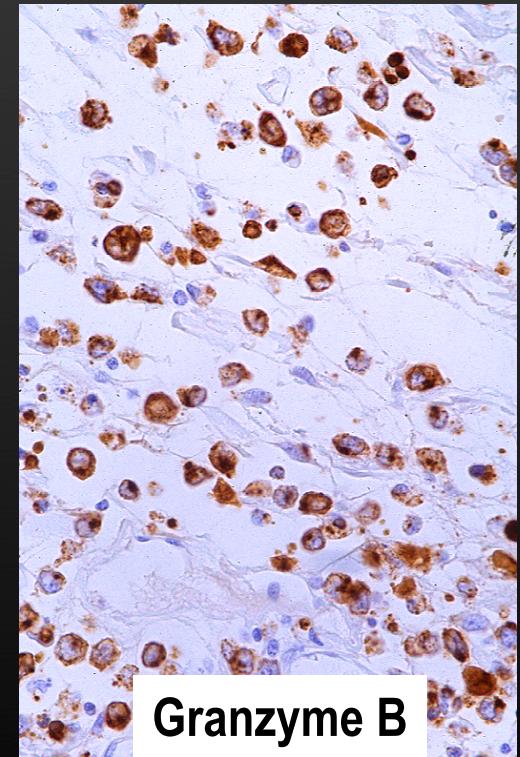
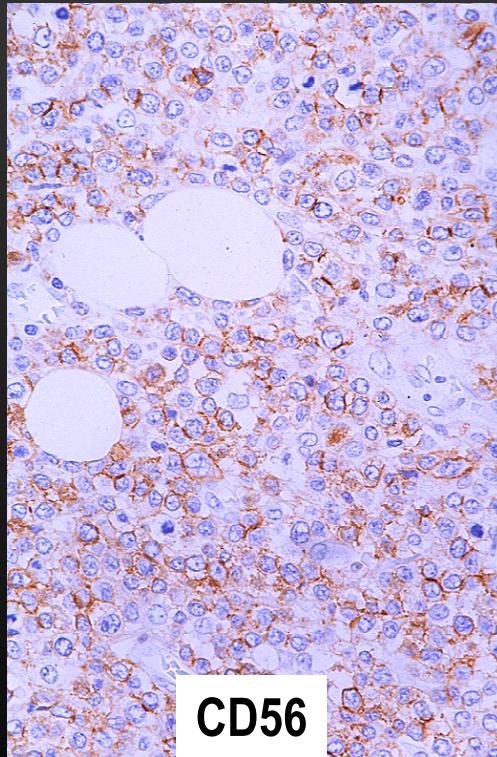
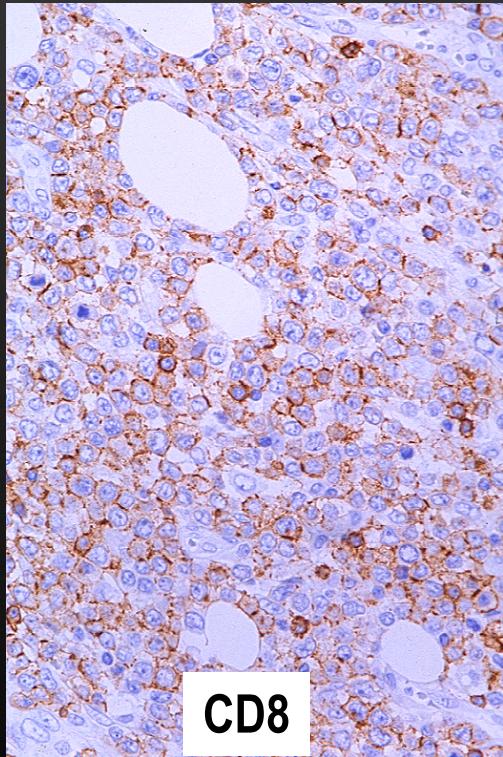


Mantle Cell lymphoma



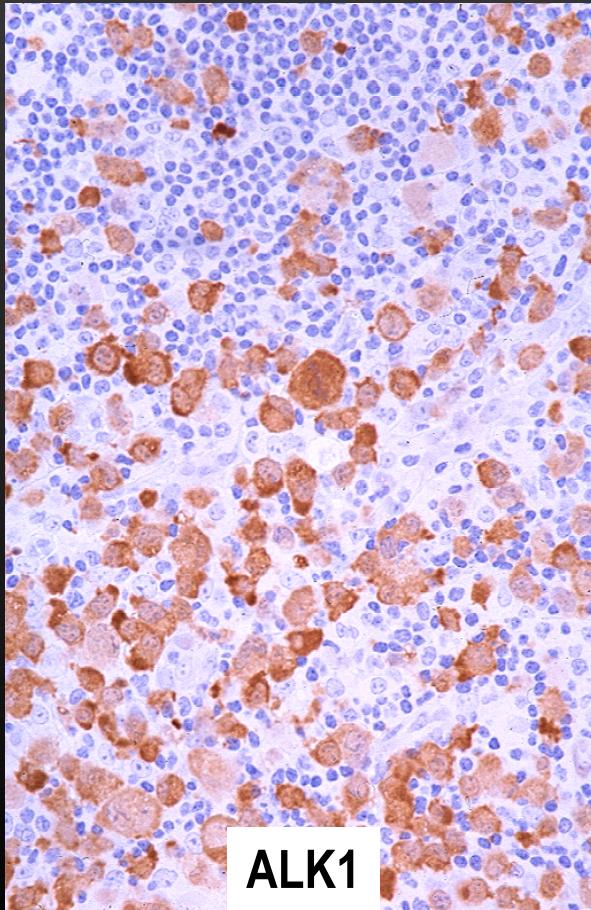
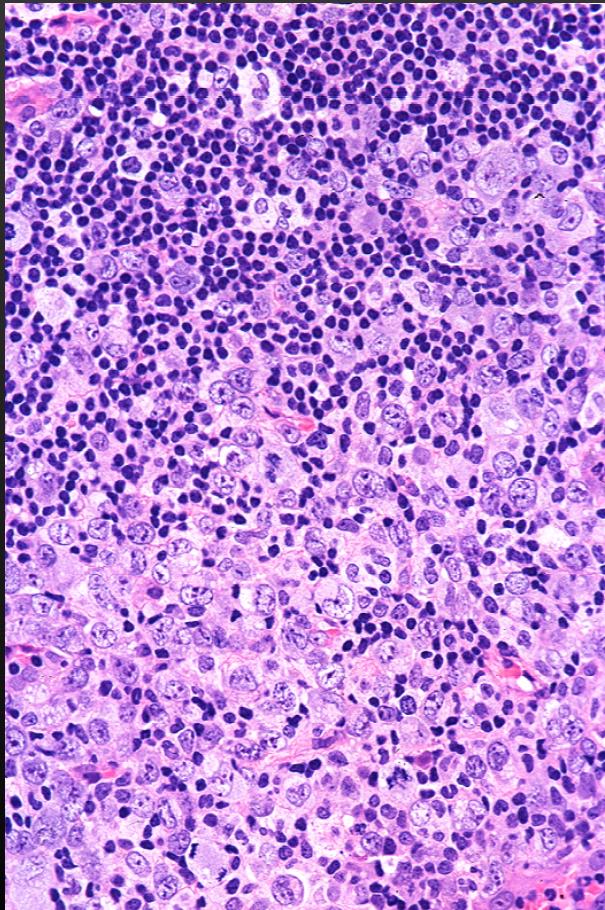
TRIS-EDTA (pH9.0) , 95°C 20 min

NK/T cell lymphoma, cytotoxic phenotype



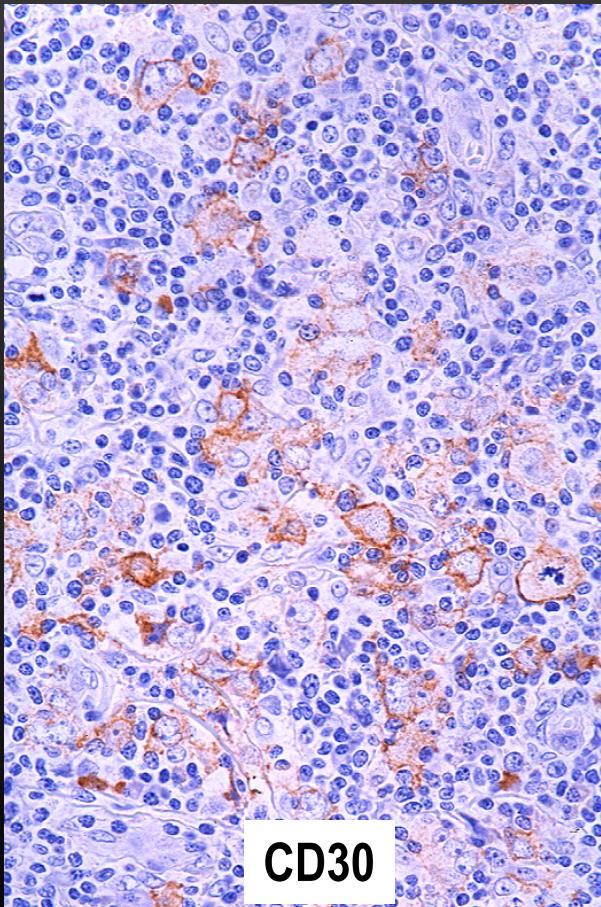
TRIS-EDTA (pH9.0) , 95°C 20 min

Anaplastic Large Cell Lymphoma (ALCL)

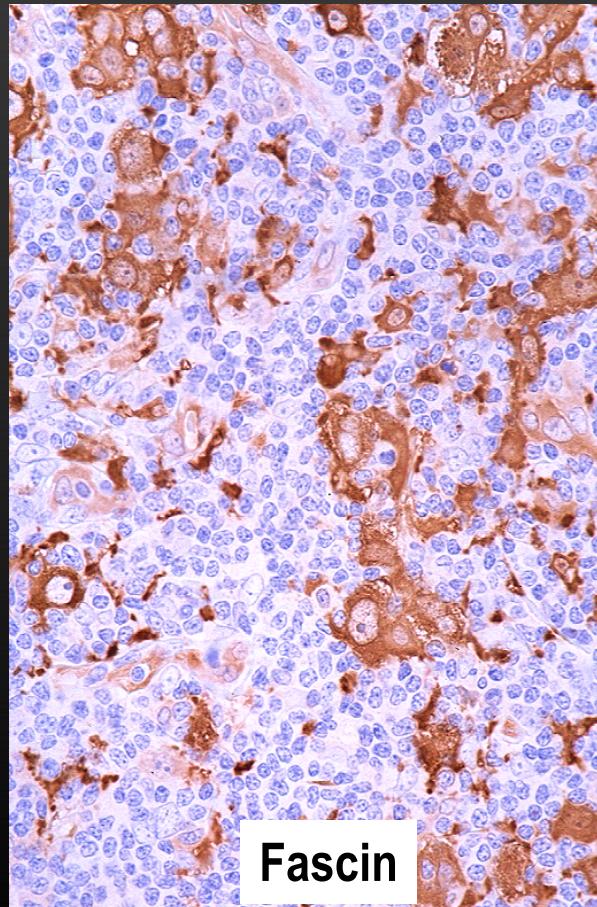


TRIS-EDTA (pH9.0) , 95°C 20 min

Hodgkin lymphoma



CD30



Fascin

TRIS-EDTA (pH9.0) , 95°C 20 min