

CD79a

The slides to be stained for CD79a contained four small lymphocytic lymphomas/chronic lymphatic leukaemias (specimens 1-4), a normal kidney (specimen 5), a colon carcinoma (specimen 6), three Hodgkin lymphomas LP (specimens 7-9), and three follicular lymphomas (specimens 10-12).

52 laboratories submitted stainings. 48 used mAb clone JCB117 (DakoCytomation), three used mAb clone HM57 (DakoCytomation) and one used HM47/A9 from Novocastra. All used HIER as pre-treatment.

At the assessment, 27 laboratories (52%) achieved optimal staining, 16 (31%) acceptable, 8 (15%) borderline, and 1 (2%) poor staining. Mandatory for an optimal CD79a staining reaction was the use of mAb JCB117 appropriately diluted in combination with an efficient HIER protocol.

The most frequent reasons for an insufficient staining were:

- too dilute primary Ab concentration (particularly when a less sensitive protocol was used)
- use of mAb HM57 (weaker B-cell staining, cross reaction to epithelia and smooth muscle cells).

As control tissue, normal lymphatic tissue is suitable. A strong staining of almost all germinal centre cells should be seen.

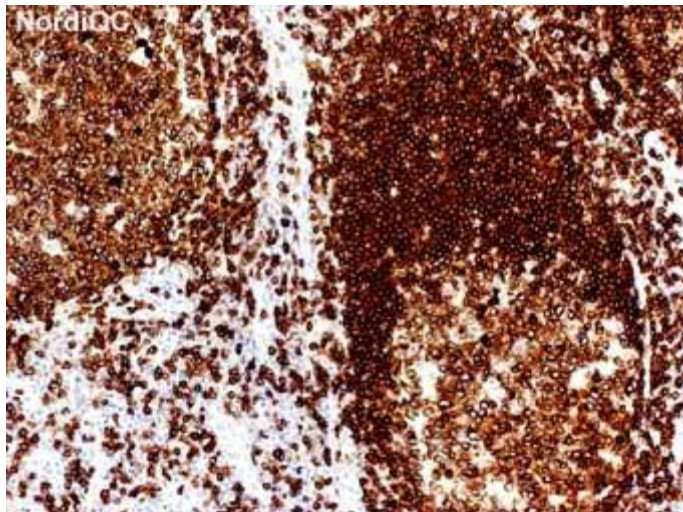


Fig. 1a
Optimal staining using mAb JCB117. Normal lymph node. The germinal centre cells are almost all strongly stained.

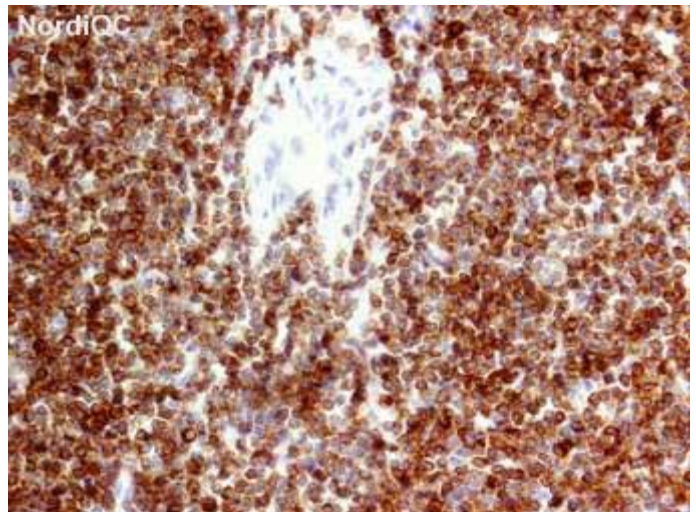


Fig. 1b
Optimal staining using mAb JCB117. Small lymphocytic lymphoma. All tumour cells are strongly stained. Note unstained vascular smooth muscle and endothelial cells.

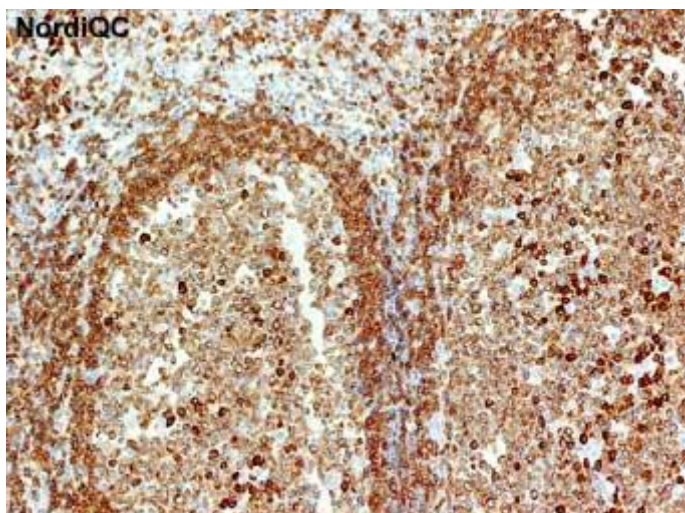


Fig. 2a
Acceptable staining. Same Ab and field as in Fig. 1a.
Somewhat weaker staining than above.

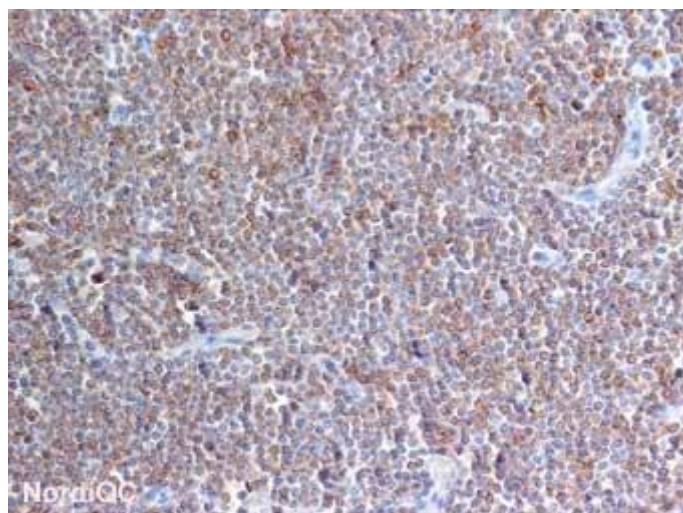


Fig. 2b
Acceptable staining. Same Ab and field as in Fig. 1b. Weaker
staining than above but still diagnostic.

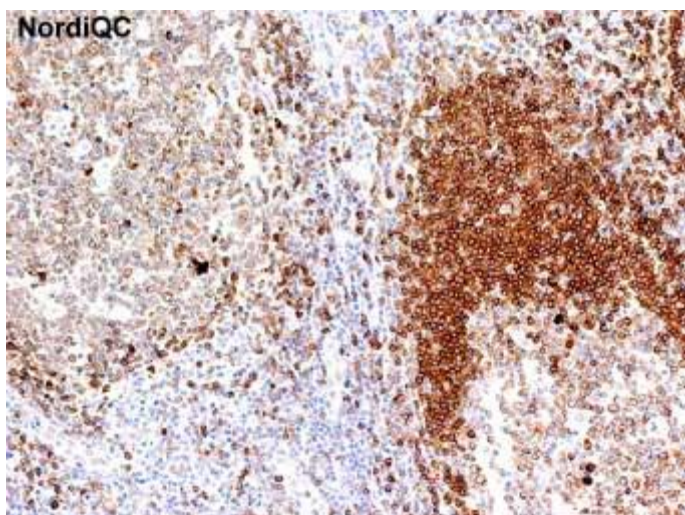


Fig. 3a
Insufficient staining using mAb HM57. Same field as in Figs. 1a
and 2a. The normal lymph node stains acceptable. However,
compare Fig 3b.

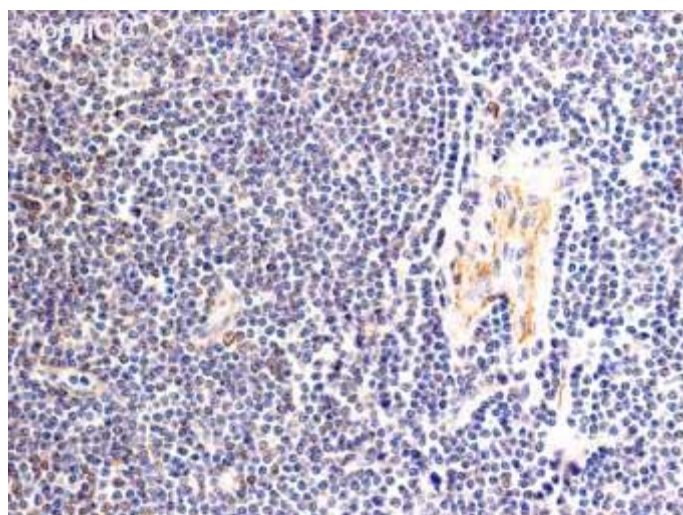


Fig. 3b
Insufficient staining using the same Ab and protocol as in Fig.
3a. Same field as in Figs. 1b and 2b. The neoplastic cells are
weakly stained whereas the vascular smooth muscle cells are
moderately stained.

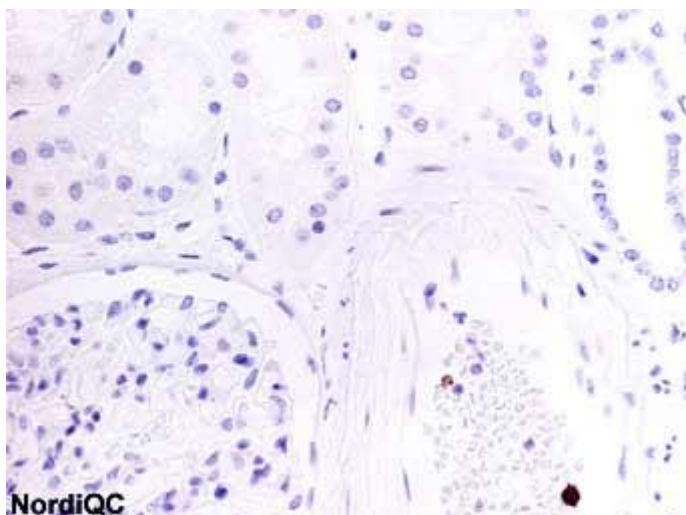


Fig. 4a
Kidney stained with mAb JCB117. No false positive staining.

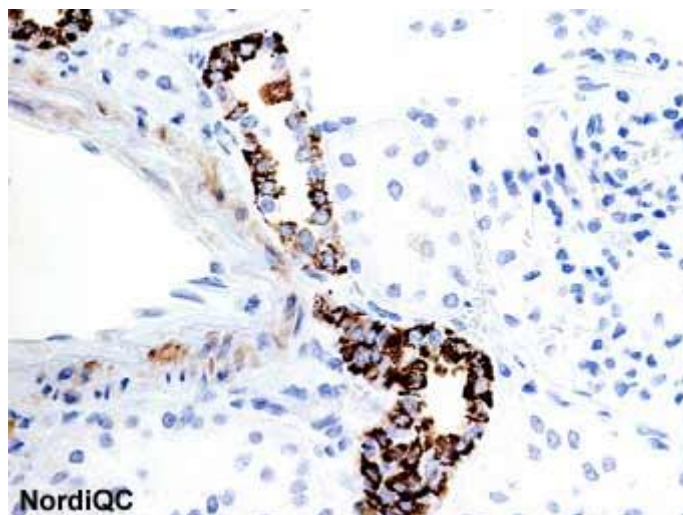


Fig. 4b
Kidney stained with mAb HM57. Strong false positive staining of collecting tubules, moderate false positive staining of vascular smooth muscle cells.

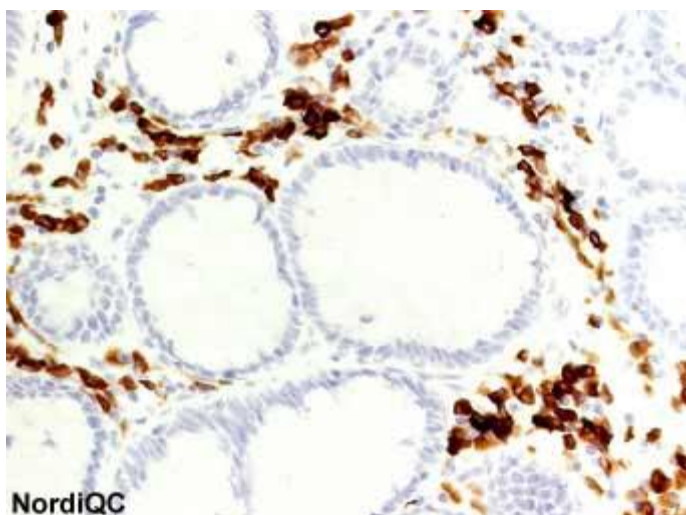


Fig. 5a
Colon mucosa stained with mAb JCB117. Strong staining of plasma cells in lamina propria, but no staining of the enterocytes or myofibroblasts.

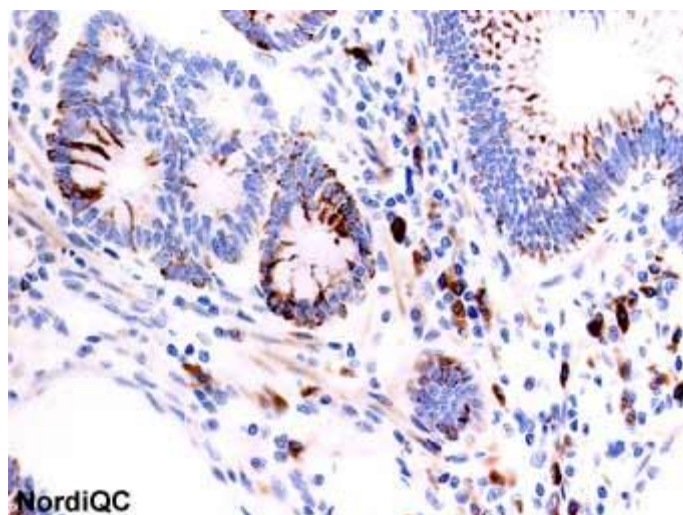


Fig. 5b
Colon mucosa stained with mAb HM57. Strong staining of plasma cells in lamina propria, but also false positive staining of the enterocytes and myofibroblasts.

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