

Cytokeratin, low molecular weight (CK-LMW)

Four of out nine participating laboratories achieved good or acceptable staining results for CK-LMW. Four laboratories used the clone Cam5.2 (CK 7/8) for the detection. Only the laboratories using this clone after proteolytic pre-treatment achieved an acceptable sensitivity (see Figs. 1a and 2a). When using Cam5.2 after heat induced epitope retrieval (HIER) only cells expressing high amounts of CK-LMW stained, thus resulting in unacceptable false negative results (Figs. 1b and 2b). HIER also induced false positive stainings in some tissues (not shown).

Two out of two laboratories used the clone C51 (CK8) and achieved good or acceptable results (Fig. 3 and 4). This clone works well with HIER.

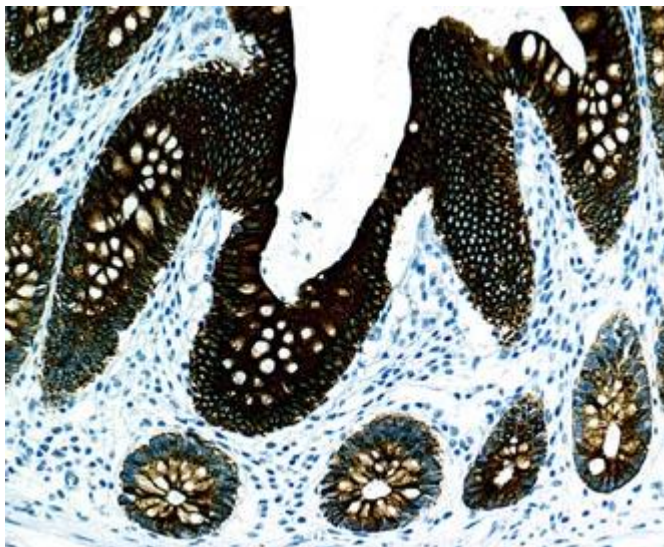


Fig. 1a
Normal colon mucosa stained with CK-LMW antibody clone Cam5.2 using a good protocol. The enterocytes are all strongly stained. Compare with Fig. 1b.

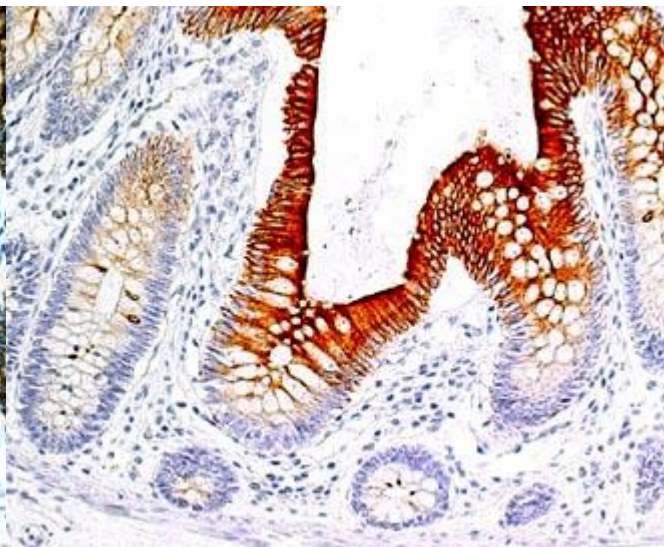


Fig. 1b
Normal colon mucosa (as in Fig. 5a) stained with CK-LMW antibody clone Cam5.2 using a poor protocol. The basal crypt cells are unstained. A major reason for the weak staining is probably an inappropriate epitope retrieval (HIER).

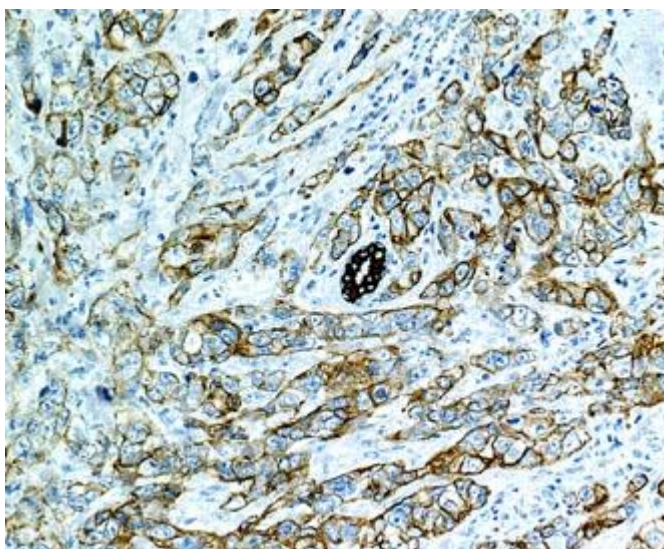


Fig. 2a.
Serous ovarian adenocarcinoma stained with CK-LMW antibody clone Cam5.2 using the same good protocol as in Fig. 1a. The majority of tumour cells are moderately stained. As an internal control an inclusion of normal surface cells is stained intensely.

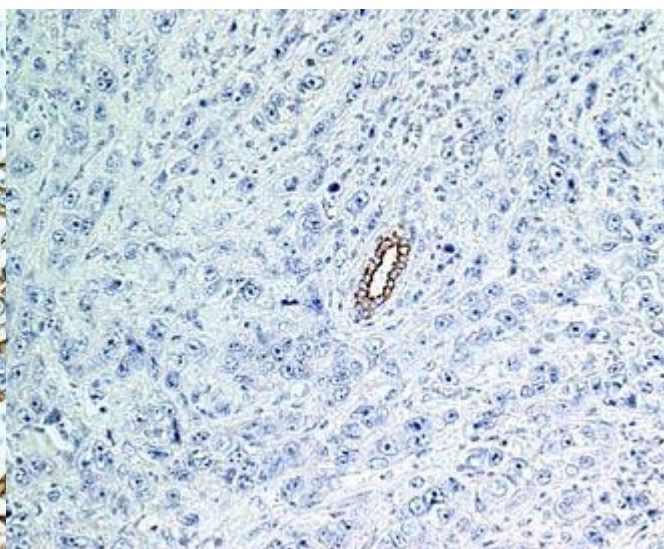


Fig. 2b.
Serous ovarian adenocarcinoma stained with CK-LMW antibody clone Cam5.2 using the same protocol as in Fig. 1b. False negative staining reaction in all the tumour cells. Only the surface cell inclusion reacts faintly positive. A major reason for the weak staining is probably an inappropriate epitope retrieval (HIER).

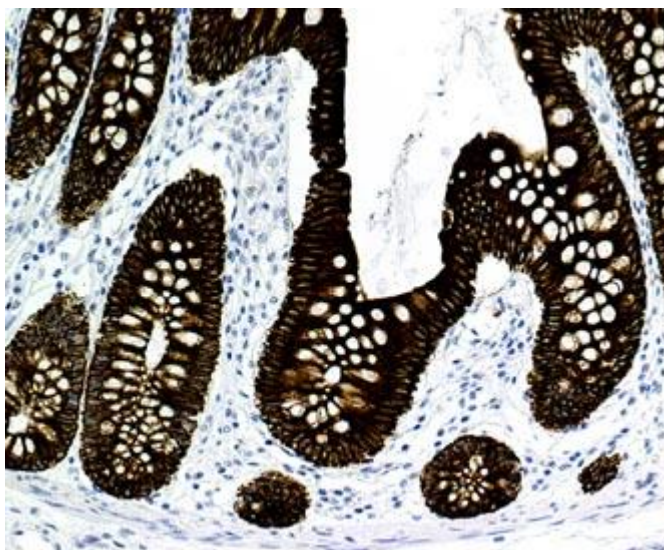


Fig. 3
Normal colon mucosa stained with CK-LMW antibody clone C51 using a good protocol. The enterocytes are all strongly stained.

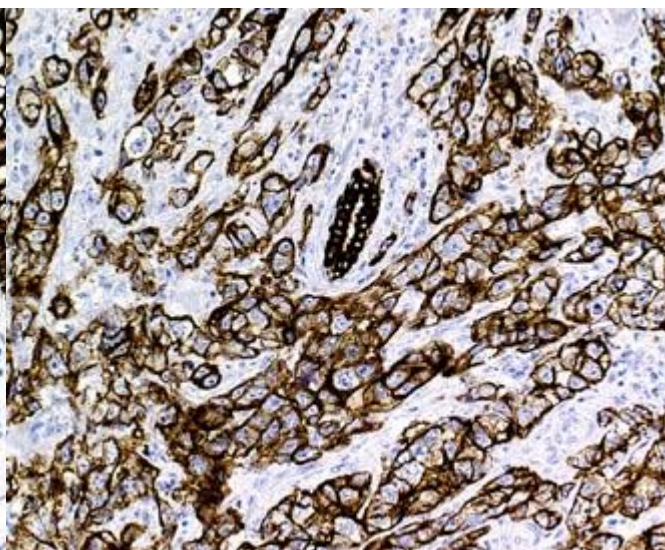


Fig. 4
A serous ovarian adenocarcinoma stained with CK-LMW clone C51 (same protocol as in Fig. 3). The tumour cells are strongly stained.

SN/MV/LE 1-4-2007