In response to Dr. Han's comments

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Received: 12 July 2010 / Accepted: 6 October 2010 / Published online: 20 November 2010
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In our study [1], we used the monoclonal antibody to cytokeratins 8/18 from Leica Microsystems, which is derived from the 5D3 clone and reacts with human cytokeratin-intermediate filament proteins 8 and 18 at 52 and 45 kD respectively [2]. The above clone is highly specific for identification of gastric and colorectal adenocarcinomas [3].

In the Immunohistochemistry section of the Patients and Materials, we annotated the cytokeratin 8/18 within the parentheses (CAM5.2, clone 5D3, Novocastra) based on the information presented on the section for cytokeratin 8/18, clone 5D3 on the IHC and ISH 2007–2009 product range catalogs of Vision Biosystems/Leica Microsystems, in which the above clone shares similar specificities to clone CAM5.2 according to research data presented by Angus et al. [4], as well as the mentions in several reference pathology books and review papers, to be the preferred antibody clone for the detection of cytokeratins 8/18 in tumors [5–7]. These views appeared to be based on the initial report of Makin et al. [8], which identified the reactive cytokeratins of clone CAM5.2 as having molecular weights of 39, 43, and 50 kD, corresponding to cytokeratins 19, 18, and 8 respectively of Moll's catalog. Subsequently, Smedts et al. [9] presented data that clone Cam 5.2 shows specific reactivity for cytokeratin 8 and is less reactive for the closely related cytokeratin 7 and unrelated to 18 or 19.

It is clear that a controversy exists as to the cytokeratins recognized by Cam 5.2 even in recent publications [10, 11], in which is cited as “8/18/CAM5.2”. It seems that the Cam 5.2 antibody in pathology community erroneously is still synonymous to cytokeratins 8/18.

References

1. Bamias A, Karina M, Papakostas P, Kostopoulos I, Bobos M, Vourli G, Samantas E, Christodoulou Ch, Pentheroudakis G, Pectasides D, Dimopoulos MA, Fountzilas G (2010) A randomized phase III study of adjuvant platinum/docetaxel chemotherapy with or without radiation therapy in patients with gastric cancer. *Cancer Chemother Pharmacol* 65:1009–1021
2. <http://bsd.leica-microsystems.com/pdfs/products/5d3-l-ce.pdf>
3. Chu PG, Weiss LM (eds) (2009) *Modern immunohistochemistry*. Cambridge University Press, New York
4. Angus B, Purvis J, Stock D, Westley BR, Samson AC, Carpenter FH, Home CH (1987) NCL-5D3: a new monoclonal antibody recognizing low molecular weight cytokeratins effective for immunohistochemistry using fixed paraffin-embedded tissue. *J Pathol* 153:377–384
5. Leong A, Cooper K, Leong FJ (2003) *Manual of diagnostic antibodies for immunohistology*, 2nd edn. Greenwich Medical Media, London
6. Dabbs DJ (ed) (2006) *Diagnostic Immunohistochemistry*, 2nd edn. Churchill Livingstone, Philadelphia, PA
7. Chu PG, Weiss LM (2002) Keratin expression in human tissues and neoplasms. *Histopathology* 40:403–439
8. Makin CA, Bobrow LG, Bodmer WF (1984) Monoclonal antibody to cytokeratin for use in routine histopathology. *J Clin Pathol* 37:975–983
9. Smedts F, Ramaekers F, Robben H, Pruszczynski M, van Muijen G, Lane B, Leigh I, Vooijs P (1990) Changing patterns of keratin expression during progression of cervical intraepithelial neoplasia. *Am J Pathol* 136:657–668
10. Greenson JK (ed) (2010) *Diagnostic pathology: Gastrointestinal*. 1st edn, Amirsys
11. Amin MB (ed) (2010) *Diagnostic pathology: Genitourinary*. 1st edn, Amirsys

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