

North Carolina Society of Histotechnology Newsletter

July 2015

Dear Colleagues,

Hope you all are safely enjoying your summer and finding fun ways to stay cool. The Board of Officers have been busy. We are already planning for the Spring 2016 Meeting and have the dates and location reserved. It was decided to have the meeting in Raleigh again. We would like to launch an annual Career Day, which was the basis for the location decision. The resources and contacts we have in the Raleigh/Durham area will make it easier to start this project with plans to move to another location in 2017. The board will need the help of the membership to make this endeavor and the society as a whole successful.

Our membership is up to 110. I am very excited about that and I am currently working with the Board of Officers to start a membership drive. Any ideas are greatly appreciated and much needed. Since our membership is 110 currently, we have 4 HOD positions for NSH. The HOD representative's information must be submitted to NSH by July 4. The HOD convenes on September 2, 2015 at 7 pm in Washington, DC. I will be attending the meeting along with three other NCSH representatives.

The minutes from previous officer's meeting is being posted on the Members Only page on the NCSH website. Starting July 1 the minutes along with the current treasurer's report will be posted for your review. To access the Member's Only page I will be sending out a Password for login. If you are a member and have not received it, please contact me or our Webmaster, Aurel Alston, and we will provide you with access.

It is the Board of Officers goal to meet at least once per quarter and to have the Newsletter out quarterly. The Newsletter will include articles and any information to keep everyone up to date on pertinent information. Please forward your suggestions to David Weil or myself and we will do our best to incorporate your suggestions into the Newsletter.

Our Volunteer coordinator is Teresa Wylie. Please contact her or any of the officers if you would like to volunteer in any capacity or have any ideas for promoting the society. It takes all of our efforts to make NCSH successful. Please consider volunteering and spread the word so we can have a large and very strong society.

Kindest Regards,

Tonia Crook, NCSH President.

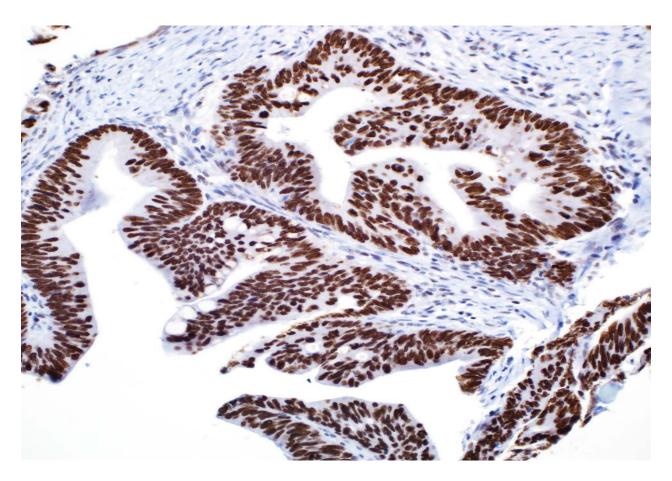
We would like to Thank Faris Omary from Cell Marque for his article submission and encourage anyone having articles, techniques or other items of histological and/or scientific interest to submit them for consideration.

IHC UPDATE: SATB2 (EP281)

Faris Omary

Colorectal cancer is the third most common cancer in men and women in the U.S. Of these colorectal cancers, 95% are adenocarcinomas.¹ Due to the high rate of metastasis of colorectal carcinomas, antibodies to accurately determine the site of origin is essential to pathologists. Cytokeratins 7 and 20 provide key immunophenotypic information to aid in the determination of the site of origin of an unknown primary carcinoma. Due to the broad reactivity of these cytokeratins, as well as expression in equivocal cases, the need for adjunct tests, such as the nuclear intestinal development transcription factor CDX-2, arose. Literature has suggested that CDX-2, with reactivity in Barrett's esophagus, sinonasal intestinal-type adenocarcinoma, and lung adenocarcinoma with enteric differentiation, serves more as a marker for cellular phenotype than an indicator of the origin of adenocarcinomas.²

Special AT-rich sequence-binding protein 2 (SATB2) is a recently described marker that functions as a nuclear matrix-associated transcription factor. SATB2 has been reported to have 93% specificity and 100% sensitivity for colorectal carcinomas when utilized in the immunohistochemical panel with cytokeratin 7 and cytokeratin 20. Upper gastrointestinal (GI) carcinomas and pancreatic ductal carcinomas are usually negative for SATB2, and ovarian carcinomas, lung adenocarcinomas, and adenocarcinomas from other origin are rarely positive for SATB2. Therefore, SATB2 is a good marker for identifying a carcinoma of colorectal origin when working on a tumor of unknown primary. Another potential utility of SATB2 is to identify neuroendocrine neoplasms/carcinomas of the left colon and rectum because SATB2 is usually negative in other neuroendocrine neoplasms of the GI tract, pancreas, and lung.



Rabbit monoclonal anti-SATB2 positively stains the nuclei of colorectal adenocarcinoma cells.

References:

- 1. http://m.cancer.org/cancer/colonandrectumcancer/overviewguide/colorectal-cancer
 cancer-overview-what-is-colorectal-cancer
- 2. Ortiz-Rey JA, et al. Appl Immunohistochem Mol Morphol. 2005; 13:142-6.
- 3. Dragomir A, et al. Am J Clin Pathol. 2014; 141:630-8.
- 4. Mangnusso K, et al. SATB2 in combination with cytokeratin 20 identifies over 95% of all colorectal carcinoma. Am J Surg Pathol. 2011; 35:937-948.
- 5. Lin F et al. Cadherin17 and SATB2 are sensitive and specific immunomarkers for medullary carcinoma of the large intestine. Arch Pathol Lab Mad. 2014; 138:1015-26.
- 6. Li Z, et al. SATB2 is a highly sensitive marker for hindgut well-differentiated neuroendocrine tumors. Mod Pathol. 2013; 26:164A.
- 7. Conner JR, et al. SATB2 is a novel marker of osteoblastic differentiation in bone and soft tissue tumors. Histopathology. 2013; 63:182-193.

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NORTH CAROLINA SOCIETY OF HISTOTECHNOLOGY

NCSH Membership 2015 Annual Fee \$15.00

| Name (First and Last): | | _ Date: |
|----------------------------------|---------------------------------------|---------------------|
| Email Address: | | |
| Employer: | | |
| Employer Address: | | |
| City, State, Postal Code: | | |
| Preferred Mailing Address | Phone: | |
| | | |
| Home Address: | | |
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| Preferred Mailing Address | Phone: | |
| Please check all that apply: | Certifications: | Years in the Field: |
| ☐ Clinical | □ HT | □ 0-5 |
| □ Research | □ HTL | \Box 6-10 |
| ☐ Supervisor/Manager | □ Other | □ 11 - 15 |
| ☐ Current NSH Member | \square Yes $\overline{\square}$ No | □ 16 − 20 |
| | | 1 21 - 24 |
| | | □ 25+ |

Are you interested in volunteering in some capacity? ☐ Yes ☐ No

Make checks payable to: \underline{NCSH}

Mail completed form and payment to:

Otis Lyght 1900 Neville Rd. Chapel Hill NC 27516

NCSH Announcements

Membership

Would you like to join NCSH? If you wish to pay by check please fill out the included membership form. Send your payment and completed form to the address provided. Your membership can also be renewed online by signing up and paying at www.nsch.info. NCSH.info uses PayPal to for electronic payments. You do not need a PayPal account in order to join NCSH or renew your membership.

NSH 41st Annual Symposium and Convention

The 41st Annual NSH Symposium/Convention will be held form August 28th through September 2nd at the Gaylord National Resort & Convention Center in Washington D.C. Please visit www.nsh.org for updates on courses and registration.

SCSHT 2015 Fall Histo-Expo October 23-25, 2015

Itinerary to follow
Litchfield Beach and Golf Resort 14276 Ocean Hwy
Pawleys Island, SC 29585 (834) 237-3000

NCSH Spring Meeting April 7, 2016 to April 9, 2016

Itinerary to follow

DoubleTree by Hilton Raleigh Durham Airport 4810 Page Creek Lane

Durham, NC 27703 (919) 941-6000

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