

Immunohistochemistry Sample Tabular Report for Antibody LP-SGX on Normal Breast and Breast Cancer Samples

Summary

Antibody LP-SGX was evaluated on normal human breast and breast cancer samples. The antibody showed predominantly cytoplasmic or perinuclear localization, with occasional nuclear, extracellular, and membranous staining. Two normal breast samples and ten samples of breast adenocarcinoma were evaluated for this study.

In the two normal breast tissue samples, the antibody showed faint to moderate cytoplasmic and nuclear staining of epithelium, and occasional faint staining of adipocytes and mast cells. In breast cancers, all ten samples showed some level of staining, ranging from blush (1) to faint (2) to moderate (3). One sample showed moderate staining, three showed faint to moderate, and five samples showed faint staining. One sample showed blush (1) staining. Within the positively staining samples, greater than 75% of the malignant cells within each sample were positive for staining. Staining was cytoplasmic, but occasionally nuclear and membranous. Representative images from each sample are shown in this report.

Methods

Antibody LP-SGX was initially evaluated at 2.5, 5, 10, and 20 ug/ml on multi-tissue sections to determine the optimum concentration for staining. In this study, LP-SGX was used at a concentration of 5 ug/ml as the primary antibody, and the principal detection system consisted of a Vector anti-goat secondary (BA-5000) and a Vector ABC-AP kit (AK-5000) with a Vector Red substrate kit (SK-5100), which produced a fuchsia-colored deposit.

Negative controls consisted of running all procedures in the absence of primary antibody. The no primary control sections were negative for staining across all tissues tested.

Tissues were also stained with positive control antibodies (CD31 and vimentin) to ensure that the tissue antigens were preserved and accessible for IHC analysis. Only tissues that were positive for CD31 and vimentin staining were selected for the remainder of the study. The negative control consisted of performing the entire immunohistochemical procedure on adjacent sections in the absence of primary antibody. Slides were imaged with a DVC 1310C digital camera coupled to a Nikon microscope. Images were stored as TIFF files with Adobe Photoshop.

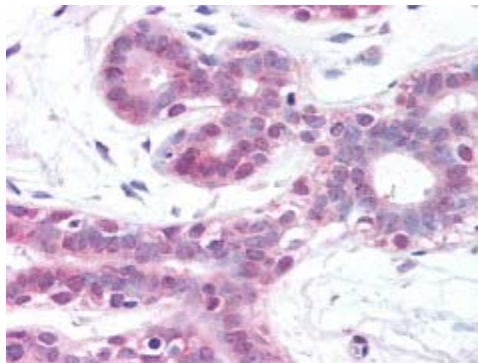
Legend for Cellular Localization of Staining

Cytoplasm (C), Extracellular (E), Membrane (M), Nuclear (N), Perinuclear (P)

Breast

Sample 1: This sample of normal breast was obtained at surgery from a 21-year-old female.

Cell/Zone	Intensity	Localization
epithelium	2	C, N

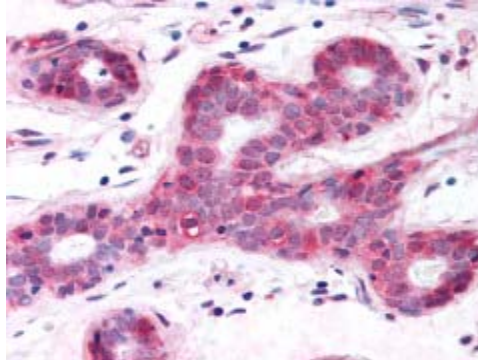


001: Ducts and Lobules 40X

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Sample 2: This sample of normal breast was obtained at surgery from an 18-year-old female.

Cell/Zone	Intensity	Localization
epithelium	3 - 4	C, N

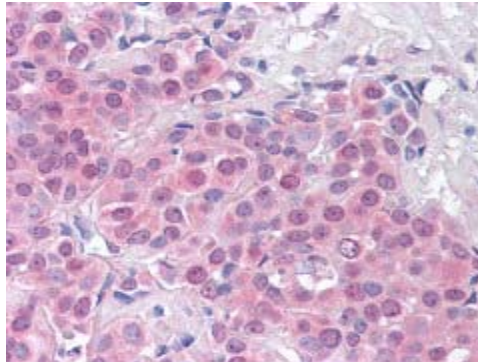


002: Ducts and Lobules 40X

Breast, Carcinoma

Sample 1: This sample of breast was obtained at surgery from a female patient of unknown age.

Cell/Zone	Intensity	Localization
malignant cells	2 - 3	C, N

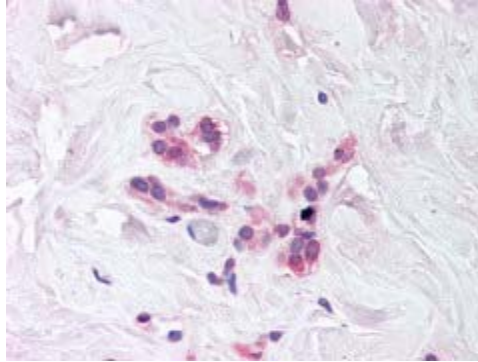


003: Malignant Cells 40X

Sample 2: This sample of breast was obtained at surgery from a 44-year-old female.

Cell/Zone	Intensity	Localization
malignant cells	3	C

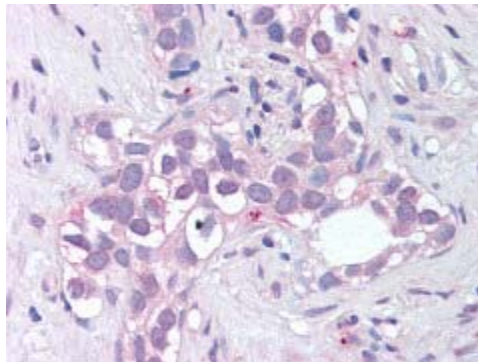
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004: Malignant Cells 40X

Sample 3: This sample of breast was obtained at surgery from an 80-year-old female.

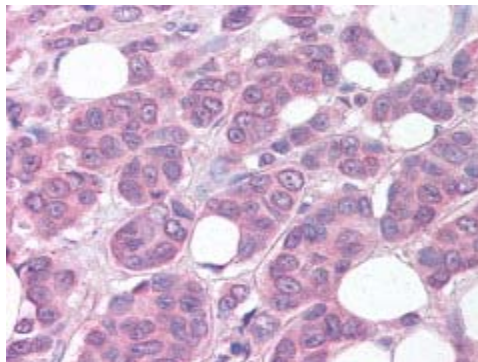
Cell/Zone	Intensity	Localization
malignant cells	2	C, M, N



005: Malignant Cells 40X

Sample 4: This sample of breast was obtained at surgery from a 40-year-old female.

Cell/Zone	Intensity	Localization
malignant cells	2 - 3	C

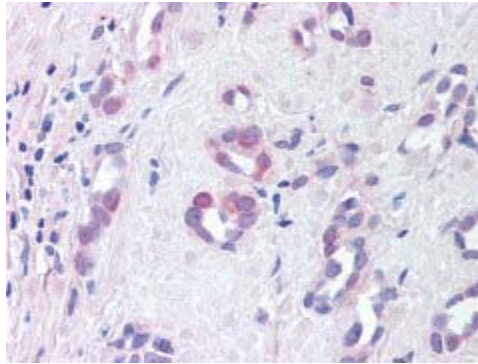


006: Malignant Cells 40X

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Sample 5: This sample of breast was obtained at surgery from a 75-year-old female with intraductal and infiltrating ductal breast carcinoma.

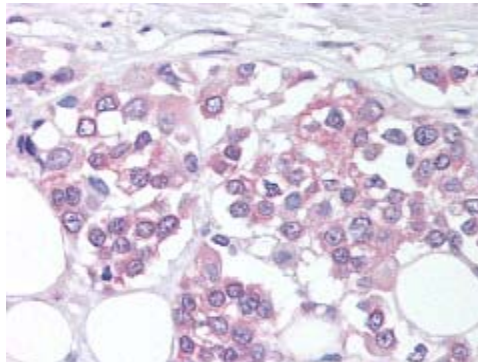
Cell/Zone	Intensity	Localization
malignant cells	2 (many)	N



007: Malignant Cells 40X

Sample 6: This sample of breast was obtained at surgery from a 77-year-old female.

Cell/Zone	Intensity	Localization
malignant cells	2	C



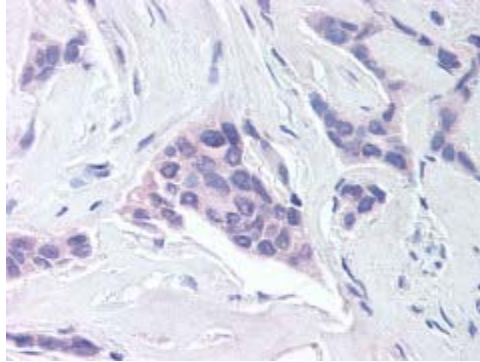
008 :Malignant Cells 40X

Sample 7: This sample of breast was obtained at surgery from a 47-year-old female.

Cell/Zone	Intensity	Localization
malignant cells	1	C

*DISCLAIMER – Although this is actual IHC data on a specific protein target, the protein name is fictitious. Any resemblance to a protein name published in the literature is coincidental.

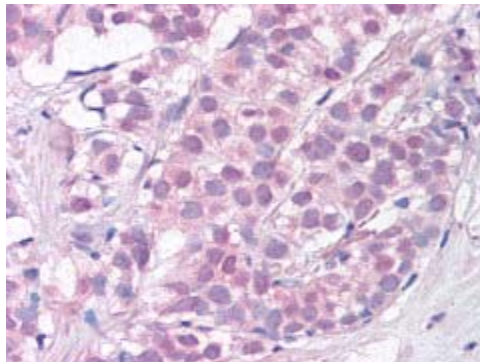
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009: Malignant Cells 40X

Sample 8: This sample of breast was obtained at surgery from a 71-year-old female.

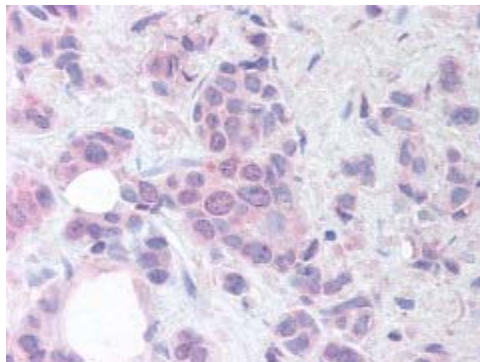
Cell/Zone	Intensity	Localization
malignant cells	2 - 3	C, N



010: Malignant Cells 40X

Sample 9: This sample of breast was obtained at surgery from a female patient of unknown age.

Cell/Zone	Intensity	Localization
malignant cells	2	C



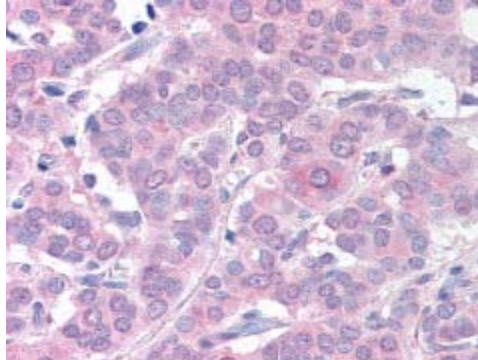
011: Malignant Cells 40X

*DISCLAIMER – Although this is actual IHC data on a specific protein target, the protein name is fictitious. Any resemblance to a protein name published in the literature is coincidental.

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Sample 10: This sample of breast was obtained at surgery from a 65-year-old female.

Cell/Zone	Intensity	Localization
malignant cells	2	C



012: Malignant Cells 40X

Note: Although these results have been reviewed by a Pathologist, these studies are to be used for research purposes only and are not intended for clinical patient care. These results were obtained on a limited series of samples and tissues and therefore cannot be construed to represent a comprehensive picture of localization across the body. Further studies are recommended if one wishes to determine the true prevalence of staining within a particular tissue or disease with this antibody, or to obtain a more comprehensive distribution of staining across a broader variety of tissues.