P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

# Cytokeratin 8; Clone K8/383
## (Concentrate)

**Availability/Contents:**

| Item # | Volume |
|---|---|
| A00136-C | 1 ml |

**Description:**

| | |
|---|---|
| Species: | Mouse |
| Immunogen: | BALB/c mice were injected with recombinant Cytokeratin 8 protein. |
| Clone: | K8/383 |
| Isotype: | IgG1 |
| Format: | This antibody is provided in a phosphate buffered saline containing 1% BSA. |
| Specificity: | Cytokeratin 8 Antibody belongs to the type II (or B or Basic) subfamily of high molecular weight Cytokeratins and exists in combination with Cytokeratin 18. Cytokeratin 8 is primarily found in the non-squamous epithelia and is present in a majority of adenocarcinomas and ductal carcinomas. It is absent in squamous cell carcinomas. |
| Background: | Epithelial cells express antimicrobial proteins in response to invading pathogens. Cytokeratins (CKs) are heteropolymers, similar to the intermediate filament (IF)-forming proteins of epithelial cells. CKs serves to distinguish different epithelial cells, in which they are expressed. CKs largely maintain the specific keratin patterns associated with their respective cells of origin thus play important role in the classification of tumor cells. Antibodies to cytokeratins are important markers of tissue differentiation. More recently, cytokeratins have also been documented as regulators of other cellular properties and functions, including apico-basal polarization, motility, cell size, protein synthesis and membrane traffic and signaling. Mutations in most of them are now associated with specific tissue-fragility disorders. CKs are now extensively used as diagnostic tumor markers, as epithelial malignancies. Therefore, cleaved cytokeratin expression in tumors and/or peripheral blood carries prognostic significance for cancer patients. Several studies have also provided evidence for active involvement of cytokeratins in cancer cell invasion and metastasis, as well as in treatment responsiveness. |
| Species Reactivity: | Human, Rat. Others not tested. |
| Positive Control: | MCF-7 or A431 cells. Human Skin, Colon, Lung or Breast carcinoma. |
| Cellular Localization: | Cytoplasm and Cell Surface. |
| Titer/Working Dilution: | Immunohistochemistry: 1:100-150 |
| Microbiological State: | This product is not sterile. |

Storage: 2° C  8° C

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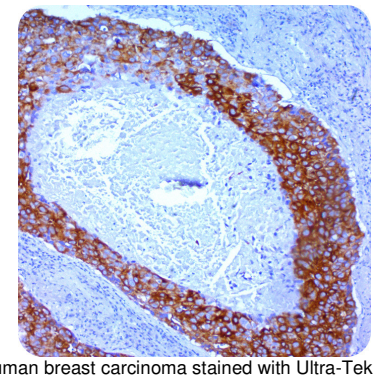
**Uses/Limitations:**

Not to be taken internally.
For Research Use Only.
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
Do not use if reagent becomes cloudy.
Do not use past expiration date.
Non-Sterile.

**Ordering Information and Current Pricing at www.scytek.com**



Human breast carcinoma stained with Ultra-Tek HRP and DAB Chromogen.

## Procedure:

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).

2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.

3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

## Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).
Do not pipette by mouth.
Avoid contact of reagents and specimens with skin and mucous membranes.
Avoid microbial contamination of reagents or increased nonspecific staining may occur.
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

## References:

1. Guelstein VI et al.; Int J Cancer 1988; 42:147-53.
2. Ku N.-O. ,Omary M.B.; J. Cell Biol. 2006; 174: 115-125 .
3. Lau A.T. ,Chiu J.F.; Cancer Res. 2007; 67: 2107-2113.
4. Linder S. et al; Cancer Lett. 2004; 214: 1-9.
5. van Dorst E.B.L. et al.; J. Clin. Pathol. 1998; 51: 679-684.
6. Barak V, et al.;.Clin Biochem. 2004 ; 37(7):529-40.

## Warranty:

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

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