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 19; Clone A53-B/A2.26

Catalog Number	Format	Volume
A00122-0002	(Ready-To-Use)	2 ml
A00122-0007	(Ready-To-Use)	7 ml
A00122-0025	(Ready-To-Use)	25 ml
A00122-C	(Concentrate)	1 ml

Intended Use

For In-Vitro Diagnostic Use. This antibody is intended for the qualitative visualization of the anatomical elements listed in the Specificity section. It is intended to be used within an Immunohistochemistry (IHC) procedure on formalin-fixed paraffin-embedded (FFPE) human tissue followed by visualization by light microscopy.

Description

Titer/Working Dilution: Ready-to-Use: No further dilution required.
Concentrate: Immunohistochemistry 1:50-100
Western Blot 1:40-100

Species: Mouse

Immunogen: Human breast cancer MCF-7 cells were used as the immunogen for the Cytokeratin 19 antibody.

Clone: A53-B/A2.26 (Ks 19.1)

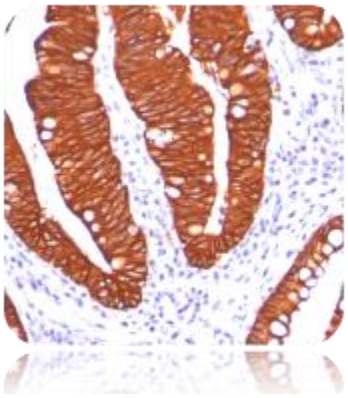
Isotype: Mouse IgG2a, Kappa

Format: Ready-To-Use antibody has been pre-titered and quality controlled to work on formalin-fixed paraffin-embedded as well as acetone fixed cryostat tissue sections. No further titration is required.
Concentrate antibody is provided in a phosphate buffered saline containing 1% BSA.

Specificity: This antibody reacts with the rod domain of human Cytokeratin 19, a polypeptide of 40kDa. The antibody recognition epitope maps between amino acid 312-335. This antibody reacts with the MCF-7 cells which are known to contain Cytokeratin 19.

Background: Cytokeratin 19 (CK19) is a type I intermediate filament protein and one of the best characterized of the keratins expressed in mature striated muscle. Cytokeratin 19 is expressed in a defined zone of basal keratinocytes in the deep outer root sheath of hair follicles. Also observed in sweat gland and mammary gland ductal and secretory cells, bile ducts, gastrointestinal tract, bladder urothelium, oral epithelia, esophagus, ectocervical epithelium. Cytokeratin 19 has been used as a useful marker for detection of tumor cells in lymph nodes, peripheral blood, bone marrow and breast cancer. Immunohistochemical data has shown that Cytokeratin 19 may be useful as a marker for human skin stem cells.

This antibody reacts with the rod domain of human Cytokeratin 19, a polypeptide of 40kDa. The antibody recognition epitope maps between amino acid 312-335. This antibody reacts with the MCF-7 cells which are known to contain Cytokeratin 19. It shows no reaction with the cells lacking Cytokeratin 19 such as A431 and HeLa. Cytokeratin 19 is not expressed in hepatocytes, therefore antibody to Cytokeratin 19 is useful in the identification of liver metastasis.



Species Reactivity: Human. Reacts weakly with mouse, rat, and guinea pig Cytokeratin 19.

Positive Control: Skin, Breast carcinoma, Colon carcinoma, Thyroid.

Cellular Localization: Cytoplasmic.

Microbiological State: Nonsterile

Materials and Reagents Required but not Provided

1. Control tissue and reagents
2. Xylene, graded alcohols, and deionized/distilled water
3. Antibody Diluent.
4. IHC detection system. Suggested: ScyTek Cat# ABZ125 "CRF Anti-Polyvalent HRP Polymer" and ScyTek Cat# ACV500 "DAB Chromogen/Substrate Kit (High Contrast)".
5. Wash buffer for rinses (ScyTek Cat# TBT500)
6. HIER Retrieval Solution
7. Hematoxylin counterstain and bluing reagent (ScyTek Cat# HMM500 and BRT500)
8. Mounting medium and coverslips

Note: ScyTek Laboratories has a wide range of IHC reagents and ancillaries that can be found at scytek.com.

Procedure

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed paraffin embedded tissue sections is significantly enhanced by pretreatment with Tis-EDTA HIER Solution (10x) pH 9.0 (ScyTek catalog# TES500) or Citrate Plus (10x) HIER Solution (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 "CRF Anti-Polyvalent HRP Polymer" (ScyTek catalog# ABZ125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Storage and Stability

Do not Freeze. Store at 2-8°C. Return to 2-8° immediately after use. Do not use after expiration date printed on label. Verify visually that antibody has not been contaminated before use. Do not use if reagent becomes cloudy or precipitates.

Storage: 2° C 8° C

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Limitations

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. This data sheet's recommendations and procedures were validated using ScyTek IHC reagents and may not be suitable for other detection systems.

Precautions

1. Contains Sodium Azide as a preservative (0.09% w/v), do not ingest. Sodium Azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. 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.
2. Do not pipette by mouth.
3. Avoid contact of reagents and specimens with skin and mucous membranes.
4. Avoid microbial contamination of reagents or increased nonspecific staining may occur.
5. The user must validate any procedures and recommendations that differ from this data sheet.
6. The SDS may be found at scytek.com

References

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