CYTOKERATIN 17 (CK17)

Format	Catalog no.	Pack size	Dilution
Concentrated	**GB 176 A,B,C**	**0.1,0.5,1.0mL**	**1:100**
Prediluted	**GB 176 AA**	**6.0 mL**	**Ready to use**

PRODUCT DESCRIPTION -

A 40 kDa polypeptide reacts with a type I keratin known as cytokeratin 17 antibody (CK17). Hair follicles and other human epithelial appendages are affected by CK17 staining. According to studies, CK17 may be a very good marker for squamous cell carcinomas in a variety of tissues, such as the oral cavity, lung, and cervix. Additionally, CK17 might be useful in differentiating myoepithelial cells from the luminal epithelium of several glands, including the breast, sweat, and salivary glands. High tumor grade, positive axillary lymph nodes, and a poorer prognosis have all been linked to positive CK17 expression in breast cancer.

INTENDED USE -

Intended for In Vitro Diagnostic Applications
Cytokeratin 17 (CK17) [Ks 17.E3] is a mouse monoclonal antibody that is intended for laboratory use in the qualitative identification of CK17 protein by immunohistochemistry (IHC) in formalin-fixed paraffin embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence should be complemented by morphological studies using proper controls and should be evaluated within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist.

SUMMARY AND EXPLANATION -

The 40 kDa polypeptide that the CK17 antibody interacts with is a type I keratin. Research has demonstrated that it is a highly effective marker for detecting squamous cell carcinomas in a variety of tissues, such as the oral cavity, lung, and cervix.
The luminal epithelium of different glands, including the mammary, sweat, and salivary glands, may be distinguished from myoepithelial cells with the use of CK17. Studies have shown that high tumor grade, positive axillary lymph nodes, and a poorer prognosis are all linked to CK17 expression in breast cancer.

PRINCIPLE OF PROCEDURE -

This antibody product may be used as the primary antibody in immunohistochemistry testing of formalin-fixed, paraffin-embedded tissue sections.

In general, immunohistochemical (IHC) staining techniques allow for the visualization of antigens via the sequential application of a specific antibody to the antigen (primary antibody), a secondary antibody to the primary antibody (optional link antibody/probe), an enzyme complex and a chromogenic substrate with interposed washing steps. The enzymatic activation of the chromogen results in a visible reaction product at the antigen site. The specimen may then be counterstained, and cover slipped. Results are interpreted using a light microscope and aid in the differential diagnosis of pathophysiological processes, which may or may not be associated with a particular antigen.

SOURCE -: Mouse monoclonal

SPECIES REACTIVITY - Human

CLONE- Ks 17.E3

ISOTYPE- IgG2b

PROTEIN CONCENTRATION - ~10 mg/ml.Call for lot specific Ig concentration.

EPITOPE/ANTIGEN - Cytokeratin 17 protein

CELLULAR LOCALISATION - Cytoplasmic

POSITIVE TISSUE CONTROL - Skin

KNOWN APPLICATIONS- Immunohistochemistry
30-40 min. At RT. Staining of formalin-fixed tissues requires heating tissue sections in between pH 7.4 - 9.0 for 45 min at 95ºC followed by cooling at room temperature for 20 minutes.

SUPPLIED AS - Buffer with protein carrier and preservative

STORAGE AND STABILITY -
Store at 2ºC to 8ºC. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2ºC to 8ºC

Materials required but not provided -

1) Positive tissue control - Skin
2) Negative control tissue(internal or external)
3) Microscope slides and coverslips
4) Staining jars or baths

5) Timer
6) Xylene or xylene substitute
7) Ethanol or reagent alcohol
8) Deionized or distilled water
9) Heating equipment or enzyme for tissue pretreatment step
10) Detection system
11) Chromogen
12) Wash buffer
13) Hematoxylin
14) Antibody diluents
15) Peroxide block
16) Light microscope
17) Mounting medium

LIMITATIONS -

The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Genebio products. Ultimately, it is the responsibility of the investigator to determine optimal conditions.