GENE BIO SOLUTION

Gross Cystic Disease Fluid Protein-15

Format	Catalog no.	Pack size	Dilution
Concentrated	GB 113 A, B	0.1, 0.5 mL	1:100
Prediluted	GB 113 AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

One indicator of apocrine differentiation is the presence of glycoproteins, such as the antibody against Gross Cystic Disease Fluid Protein-15 (GCDFP-15). In both cytologic preparations (fine needle aspirates) and formalin-fixed, paraffin-embedded tissues, GCDFP-15 has been demonstrated to be a specific marker for breast cancer in multiple investigations. Research on breast cancer has revealed a strong association between GCDFP-15 and tumor profiles that indicate a positive prognosis. The expression of GCDFP-15 was found in 73.3% of invasive breast carcinomas, according to another investigation on breast cancer. Additionally, GCDFP-15 is expressed by submandibular salivary glands and axillary sweat glands.

INTENDED USE -

The GCDFP-15 (GCDFP-15) [D6] mouse monoclonal antibody is designed for use in immunohistochemistry (IHC) as a qualitative marker in human tissues that have been fixed with formalin-fixed paraffin-embedded (FFPE). A trained pathologist should review the patient's medical history and other diagnostic tests in conjunction with morphological investigations employing appropriate controls to supplement the clinical interpretation of staining or lack thereof.

SUMMARY AND EXPLANATION -

The pathologic discharge from the breast known as gross cystic disease fluid contains many glycoproteins, one of which is GCDFP-15. Apocrine differentiation is thought to be indicated by it. In both cytologic preparations (fine needle aspirates) and formalin-fixed paraffin-embedded tissues, GCDFP-15 (BRST-2) has been demonstrated to be a specific marker for breast cancer in multiple studies. When it comes to breast cancer, studies have demonstrated an overall sensitivity rating of 74% and a specificity rating of 95%. Additionally, GCDFP-15 was detected in 56.5% of initial, recurring, or metastatic breast carcinomas in another investigation using fine-needle aspirates. Axillary sweat glands and submandibular salivary glands are two more examples of tissues that express GCDFP-15.

PRINCIPLES OF PROCEDURE -

Immunohistochemistry is a multi-step method that can be used to detect antigens in cells and tissues. The primary antibody is bound to its specific epitope in the initial stage. To bind to an antigen that has been previously labeled with a primary antibody, a secondary antibody is introduced. After that, the secondary antibody is attached with an enzyme label, and a colorimetric reaction shows that the bound antibody has been detected.

SOURCE - Mouse monoclonal

SPECIES REACTIVITY - Human; others not tested

CLONE - D6

ISOTYPE - IgG2a

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

EPITOPE/ANTIGEN - Gross Cystic Disease Fluid Protein-15

CELLULAR LOCALISATION - Cytoplasmic

POSITIVE TISSUE CONTROL - Breast cancer

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) Positivetissuecontrol-Breastcancer
2) Negativecontroltissue(internalorexternal)
3) Microscopeslidesandcoverslips

4) Stainingjarsorbaths
5) Timer
6) Xyleneorxylenesubstitute
7) Ethanolorreagentalcohol
8) Deionizedordistilledwater
9) Heatingequipmentorenzymefortissuepretreatmentstep
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.