GENE BIO SOLUTION

E-CADHERIN (MOUSE)

Format	Catalog no.	Pack size	Dilution
Concentrated	GB 170 A, C	0.1, 1.0 mL	1:100
Prediluted	GB 170 AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

The E-cadherin mouse antibody is a transmembrane glycoprotein that facilitates adhesion between epithelial cells. The absence of E-cadherin can lead to the disintegration of cellular aggregates. Literature suggests that E-cadherin may act as a tumor suppressor protein. Numerous studies have linked the loss of E-cadherin to metastasis and unfavourable prognosis in invasive breast cancer. Further research has indicated that E-cadherin may assist in distinguishing between ductal and lobular breast neoplasms. E-cadherin immunostaining has been demonstrated to serve as an independent predictor of disease progression in bladder cancer.

INTENDED USE -

E-cadherin [HECD-1] is a mouse monoclonal antibody designed for laboratory application in the qualitative detection of E-cadherin protein using immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence must be supplemented by morphological studies utilizing appropriate controls and assessed in conjunction with the patient's clinical history and other diagnostic tests by a skilled pathologist. with the patient's clinical history and other diagnostic tests by a skilled pathologist.

SUMMARY AND EXPLANATION -

E-cadherin is a transmembrane glycoprotein that facilitates adhesion between epithelial cells. The absence of E-cadherin can lead to the disintegration of cellular aggregates. Consequently, it is hypothesized that E-cadherin may act as a tumor suppressor protein. The absence of E-cadherin is linked to metastasis and unfavorable prognosis in invasive breast cancer and aids in distinguishing between ductal and lobular breast neoplasms. It has also been demonstrated to be an independent predictor of disease progression in bladder cancer.

PRINCIPLE OF PROCEDURE -

Antigen detection in tissues and cells is a multi-step immunohistochemistry procedure. The first step attaches the primary antibody to its designated epitope. Following the tagging of the antigen with a primary antibody, either a one-step or two-step detection method may be utilized. A single-step procedure will utilize a polymer tagged with an enzyme that attaches to the main antibody. A two-step approach will involve the addition of a linker antibody to bind to the main antibody. An enzyme-conjugated polymer is subsequently introduced to attach to the linker antibody. The identification of the attached antibodies is indicated by a colorimetric reaction.

SOURCE - Mouse monoclonal

SPECIES REACTIVITY - Human; others not tested

CLONE - HECD-1

ISOTYPE - IgG1

PROTEIN CONCENTRATION - Call for lot specific Ig concentration.

EPITOPE/ANTIGEN - E-cadherin

CELLULAR LOCALISATION - Cytoplasmic/ membrane

POSITIVE TISSUE CONTROL - Breast cancer

KNOWN APPLICATIONS - I mmunohistochemistry
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

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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.