GENE BIO SOLUTION

P-120 + E-CADHERIN

Format	Catalog no. -	Pack size	Dilution
Concentrated	GB3011DSAA	-	-
Prediluted		6.0 mL	Ready to use

PRODUCT DESCRIPTION -

The diagnostic repeatability of lobular vs ductal lesions, based solely on histology, is suboptimal. Accurate differentiation among atypical lobular hyperplasia, lobular carcinoma in situ, and low-grade ductal carcinoma in situ is essential for effective patient care. Research indicates that E-cadherin, a negative membrane marker for lobular neoplasia, is effective in differentiating ductal neoplasia from lobular neoplasia; nevertheless, as a negative marker for lobular carcinoma, its interpretation might be complex, especially in difficult situations. Research has demonstrated precise differentiation between ductal and lobular neoplasia in the breast using a combination of p120 and E-cadherin, providing additional clarity in distinguishing low-grade ductal cancer in situ from lobular neoplasia. Other tumors that may morphologically resemble lobular carcinoma include diffusely infiltrating forms of rectal and gastric carcinomas, which have diffuse cytoplasmic p120 immunostaining. In conclusion, this Multiplex IHC stain may facilitate the identification of the presence and extent of lobular lesions due to its vivid pink hue, hence contributing to a more precise diagnosis.

INTENDED USE -

p120 + E-cadherin is designed for laboratory application in the qualitative detection of p120 and E-cadherin proteins 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.

SUMMARY AND EXPLANATION -

The diagnostic repeatability of lobular vs ductal lesions, based solely on histology, is suboptimal. Accurate differentiation among atypical lobular hyperplasia, lobular carcinoma in situ, and low-grade ductal carcinoma in situ is essential for effective patient care. Research indicates that E-cadherin, a negative membrane marker for lobular neoplasia, is effective in differentiating ductal neoplasia from lobular neoplasia; nevertheless, as a negative marker for lobular carcinoma, its interpretation might be complex, especially in difficult situations. Research has

demonstrated precise differentiation between ductal and lobular neoplasia in the breast using a combination of p120 and E-cadherin, providing additional clarity in distinguishing low-grade ductal cancer in situ from lobular neoplasia. Other tumors that may morphologically resemble lobular carcinoma include diffusely infiltrating forms of rectal and gastric carcinomas, which have diffuse cytoplasmic p120 immunostaining. In conclusion, this Multiplex IHC stain may facilitate the identification of the presence and extent of lobular lesions due to its vivid pink hue, hence contributing to a more precise diagnosis.

PRINCIPLE OF PROCEDURE -

This product is a primary antibody cocktail comprising mouse and rabbit antibodies, suitable for use in a Multiplex IHC staining process to achieve a two-color stain. After administering the primary antibody cocktail to the tissue sample, detection is executed using distinct secondary antibodies tailored to each species (i.e., mouse or rabbit) of the primary antibody cocktail, which are conjugated to horseradish peroxidase (HRP) or alkaline phosphatase (AP) enzymes. Visualization is achieved through the use of chromogenic substrates (DAB and Red), which are enzymatically activated (by HRP or AP, respectively) to generate a colored reaction product at the antigen site. The specimen may undergo counterstaining and be coverslipped. Results are analyzed utilizing a light microscope.

Reagent Provided:

p120 + E-cadherin is provided as a prediluted antibody cocktail of antip120 and anti-E-cadherin antibodies, in buffer with carrier protein and preservative.

ANTIBODY CLONE	anti-p120	anti-E-cadherin
SOURCE ISOTYPE	98/pp120 Mouse	EP6 Rabbit
EPITOPE/ANTIGEN	monoclonal IgG1	monoclonal IgG E-
CELLULAR	P120 catenin	cadherin
LOCALISATION STAINING	Cytoplasmic	Membrane
	Red	Brown (DAB)

SPECIES REACTIVITY - Human; others not tested

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. The product is stable to the expiration date printed on the label, when stored under these conditions.

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.