GENE BIO SOLUTION

Estrogen Receptor (ER) [1D5]

Format	Catalog no.	Pack size	Dilution
Concentrated	GB054A,C	0.1, 1.0 mL	1:100
Prediluted	GB054AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

The 66 kDa protein known as the estrogen receptor antibody (ER) functions as a nuclear hormone receptor that is dependent on estrogen. The nuclei of epithelial cells in normal breast and endometrial tissues, as well as a fraction of breast carcinomas, have been found to contain ER, according to studies. The six functionally distinct domains of the ER protein are designated A through F. The amino-terminal domain in the A/B region of ER-alpha is reacted with by ER [1D5]. Numerous studies on breast cancer have published this clone, which has been shown to function in tissues that have been paraffin-embedded and treated with formalin.

INTENDED USE -

Analyte Specific Reagent. Analytical and performance characteristics are not established.

SUMMARY AND EXPLANATION -

A mouse monoclonal antibody called Estrogen Receptor (ER) [1D5] targets the human estrogen receptor protein. In tissues that respond to estrogen, the 66 kDa protein known as ER mediates the effects of estrogen. It belongs to a sizable superfamily of nuclear hormone receptors that are transcription factors that are activated by ligands. The ER gene is made up of eight exons and over 140 kb of genomic DNA. These result in a protein with six distinct functional domains, denoted A through F. In the A/B region of ER-alpha, ER [1D5] interacts with the amino-terminal domain. This clone has been reported in multiple breast cancer research studies and has been shown to function in formalin-fixed, paraffin-embedded tissues.

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, a secondary antibody is introduced to attach to the primary antibody. An enzyme label is subsequently

introduced to attach to the secondary antibody; the detection of the attached antibody is demonstrated using a colorimetric reaction.

SOURCE - Mouse monoclonal

CLONE- 1D5

ISOTYPE - IgG1/Kappa

POSITIVE TISSUE CONTROL - Breast Carcinoma

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. Do not use after expiration date. Diluted reagents should be used promptly; any remaining reagent should be stored at 2ºC to 8ºC.

Materials required but not provided -

1) Positivetissuecontrol- BreastCarcinoma
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.