GENE BIO SOLUTION

HPV-16

Format	Catalog No.	Pack size	Dilution
Concentrated	GB-186C -	1.0 mL	1 : 100
Prediluted		-	-

PRODUCT DESCRIPTION -

Using a recombinant vaccinia virus that encodes the primary capsid protein L1 of the human papillomavirus HPV-16 antibody, the CAMVIR-1 antibody was produced against the L1 protein. Additionally, this antibody recognizes the HPV-16 L1 antigen on regular cervical smears and in biopsy tissues that have been paraffin embedded and preserved with formalin. Very modest reactions were rarely seen with biopsy specimens or smears carrying HPV-6 or HPV-11, however the antibody consistently and strongly interacts with specimens containing HPV-16 or HPV-33.

INTENDED USE - For Research Purposes Only. Not intended for diagnostic procedures.

SUMMARY AND EXPLANATION -

Using a recombinant vaccinia virus that encodes the L1 protein as a screening target, a monoclonal antibody was produced against the main capsid protein L1 of human papillomavirus type 16. In cells infected with the L1-vaccinia virus, this antibody, known as CAMVIR-1, interacted with a 56 kDa protein that was primarily found in the nucleus. Additionally, the antibody recognizes the HPV-16 L1 antigen on standard cervical smears and in biopsy tissues that have been paraffin-embedded and formalin-fixed. Very modest reactions were rarely seen with biopsy specimens or smears carrying HPV-6 or HPV-11, however the antibody consistently and strongly interacts with specimens containing HPV-16 or HPV-33. For additional analysis, a panel of p16 and Ki-67 can be utilized.

PRINCIPLE OF PROCEDURE -

Antigen identification in tissues and cells is a multi-phase immunohistochemistry procedure. The first step attaches the primary antibody to its designated epitope. Following the tagging of the antigen with a primary antibody, a one-, two-, or three-step detection protocol may be utilized. The one-step approach will utilize an enzyme-conjugated polymer that attaches to the main antibody. A two-step approach will involve the addition of a secondary antibody to bind to the primary antibody. An enzyme-conjugated polymer is subsequently introduced to interact with the secondary antibody. The three-step detection protocol will include the addition of a

secondary antibody to bind to the main antibody, succeeded by a linker antibody step to enhance binding efficacy. An enzyme-conjugated polymer is subsequently introduced to attach to the linker antibody. These detections of the bound antibodies are evidenced by a colorimetric reaction.

SOURCE - Mouse monoclonal antibody

SPECIES REACTIVITY - Human; others not tested

CLONE - CAMVIR-1

ISOTYPE - IgG2a

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

EPITOPE/ANTIGEN - HPV 16

CELLULAR LOCALISATION - Nuclear

POSITIVE TISSUE CONTROL - Infected cervical biopsy

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 95°C followed by cooling at room temperature for 20 minutes.

SUPPLIED AS - Buffer with a protein carrier and preservative

STORAGE AND STABILITY -

Store at 2°C to 8°C. 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 2°C to 8°C.

Materials required but not provided -

1) Positive tissue control - Infected cervical biopsy
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-

This product is provided for Research Use Only (RUO) and is not for use in diagnostic procedures. Suitability for specific applications may vary and it is the responsibility of the end user to determine the appropriate application for its use.