Spirochete (Polyclonal)

Format	Catalog no.	Pack size	Dilution
Concentrated	GB135A,B -	0.1, 0.5 mL	1:100
Prediluted		-	-

PRODUCT DESCRIPTION -

Specifically designed to detect spirochete bacteria, this high-quality antibody provides exceptional specificity and sensitivity, enabling accurate visualization of spirochetes in various tissue samples. Ideal for research in infectious diseases, this antibody enhances your understanding of spirochete pathogenesis. Compatible with multiple IHC protocols, it offers reliable results for both qualitative and quantitative analyses.

INTENDED USE -

The Spirochete Polyclonal Antibody is intended for use in immunohistochemistry to detect and visualize spirochete bacteria in formalin-fixed, paraffin-embedded tissue sections. This antibody is designed for research applications in the study of infectious diseases, aiding in the identification and characterization of spirochete infections.

SUMMARY AND EXPLANATION - The Spirochete Polyclonal Antibody is a vital tool in immunohistochemistry for the detection of spirochete bacteria, such as those causing Lyme disease and syphilis. This antibody is derived from a diverse pool of immunoglobulins, ensuring broad specificity and sensitivity to spirochete antigens.

In IHC applications, the antibody binds specifically to spirochetes in formalin-fixed, paraffin-embedded tissue sections, allowing for clear visualization under a microscope. By providing insight into the presence and distribution of spirochetes, this antibody plays a crucial role in research focused on understanding infectious diseases and their pathological effects. Its reliability and performance make it an essential resource for researchers in the field.

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 - Rabbit polyclonal

SPECIES REACTIVITY - Reactive with various spirochete species, including *Borrelia burgdorferi* and *Treponema pallidum*.

CLONE - Not applicable

ISOTYPE - IgG

PROTEIN CONCENTRATION - Call for lot specific Ig concentration.

EPITOPE/ANTIGEN - This polyclonal antibody targets conserved proteins present on the surface of spirochete bacteria, including major outer membrane proteins, which are critical for bacterial identification and characterization.

CELLULARLOCALISATION-TheSpirochetePolyclonalAntibodyprimarily localizes to the surface of spirochete bacteria within tissue sections, allowing for clear visualization in infected areas.

POSITIVE TISSUE CONTROL - Recommended positive control tissues include sections from infected animal models or human tissues known to harbor spirochete infections, such as skin lesions in Lyme disease or syphilitic lesions. These controls ensure the antibody's efficacy and specificity in detecting spirochetes.

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- Recommendedpositivecontroltissuesinclude sections from infected animal models or human tissues known to harbor

spirochete infections, such as skin lesions in Lyme disease or syphilitic lesions. These controls ensure the antibody's efficacy and specificity in detecting spirochetes.

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.