CD3 (LN10)

Format	Catalog no.	Pack size	Dilution
Concentrated	GB 3152 A, C	0.1, 1.0 mL	1:50
Prediluted	GB 3152 AA, H	6.0, 25 mL	Ready to use

PRODUCT DESCRIPTION -

CD3 is expressed during the whole T-cell development process. CD3 serves as a highly specific and sensitive marker for T-cell lineage, rendering it optimal for the immunophenotypic assessment of lymphohaematopoietic malignancies. Significant exceptions encompass certain aggressive large T-cell lymphomas and CD30 (Ki-1) positive anaplastic large cell lymphomas, which may lack detectable antigen expression. CD3 [LN10] has exhibited superior staining relative to other CD3 clones such as PS1, F7.2.38, and SP7. A monoclonal antibody targeting human CD3 is considered a dependable pan T-cell antibody utilized in the immunophenotyping of lymphomas in paraffin-embedded sections.

INTENDED USE -

CD3 [LN10] is a mouse monoclonal antibody designed for laboratory application in the qualitative detection of CD3 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.

SUMMARY AND EXPLANATION -

CD3 is expressed during the whole T-cell development process. CD3 is a highly specific and sensitive marker for T-cell lineage, rendering it optimal for the immunophenotypic assessment of lymphohaematopoietic malignancies. Significant exceptions comprise certain aggressive large T-cell lymphomas and CD30 (Ki-1) positive anaplastic large cell lymphomas, which may lack detectable antigen expression. CD3 [LN10] has exhibited superior staining in comparison to other CD3 clones such as PS1, F7.2.38, and SP7. A monoclonal antibody targeting human CD3 is considered a dependable pan T-cell antibody utilized in the immunophenotyping of lymphomas within paraffin sections.

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 protocol may be employed. 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 connect with the main antibody. An enzyme-conjugated polymer is subsequently introduced to attach to the linkerantibody.Thepresenceofboundantibodiesisdemonstratedbyacolorimetric response.

SOURCE - Mouse monoclonal

SPECIES REACTIVITY - Human; others not tested

CLONE - LN10

ISOTYPE - IgG1

PROTEIN CONCENTRATION - Call for lot specific Ig concentration.

EPITOPE/ANTIGEN - : CD3

CELLULAR LOCALISATION - Cell surface

POSITIVE TISSUE CONTROL - Tonsil

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 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 - Tonsil
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.