GENE BIO SOLUTION

BOB-I

Format	Catalog no.	Pack size	Dilution
Concentrated	GB418A,B	0.1, 0.5 mL	1:50
Prediluted	GB418AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

BOB-1 antibody serves as a B-lymphocyte-specific transcriptional co-activator for the Oct-1 and Oct-2 transcription factors. BOB-1 and Oct-2 are crucial in determining the B-lineage of CD20-plasmablastic or primary effusion subtypes of diffuse large B-cell lymphoma (DLBCL). Additional research indicates that BOB-1, CD79a, and Cyclin E serve as effective indicators for differentiating classical Hodgkin's lymphoma from primary mediastinal large B-cell lymphoma. The robust nuclear expression of BOB-1 and Oct-2 in germinal center-derived lymphomas renders these antibodies a distinct category of broad-spectrum B-lineage immunohistochemical markers to assist in the differential diagnosis of lymphomas.

INTENDED USE -

BOB-1 [TG14] is a mouse monoclonal antibody designed for laboratory applications to qualitatively identify B-cell specific octamer binding protein-1 via 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 evaluations by a certified pathologist.

SUMMARY AND EXPLANATION -

BOB-1 (B-cell specific octamer binding protein-1) is a transcriptional coactivator specific to B-lymphocytes. It engages with Oct-1 and Oct-2 transcription factors. BOB-1 and Oct-2 are crucial for germinal center development and immunoglobulin synthesis. BOB-1 has been identified in all B-cell populations within reactive lymphoid organs, with the most pronounced expression observed in germinal center B-cells and plasma cells. BOB-1 and Oct-2 are particularly effective for determining the B-lineage of CD20-plasmablastic or primary effusion subtypes of diffuse large B-cell lymphoma (DLBCL). Additional research has demonstrated that BOB-1, CD79a, and Cyclin E are the most suitable markers for differentiating classical Hodgkin's lymphoma from primary mediastinal large B-cell lymphoma. The robust nuclear expression of BOB-1 and Oct-2 in germinal center-derived lymphomas establishes these antibodies as a

distinct category of broad-spectrum B-lineage immunohistochemical markers for the differential diagnosis of lymphomas.

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

SPECIES REACTIVITY - Human; others not tested

CLONE - TG14

ISOTYPE - IgG2b

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

EPITOPE/ANTIGEN - Prokaryotic recombinant protein containing 116 amino acids of the C-terminus of BOB-1

CELLULAR LOCALISATION - Nuclear

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 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) 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.