

SOX11(M)

Format	Catalog No.	Pack size	Dilution
Concentrated	GB3120A,C	0.1, 1.0 mL	1:50
Prediluted	GB3120AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

The SOX11 antibody (SRY (Sex Determining Region Y)-Box 11) belongs to the SOX family of transcription factors and plays a role in regulating embryonic development and determining cell fate. Diagnosing mantle cell lymphoma (MCL) can be challenging, particularly in the absence of t(11;14) translocation and cyclin D1 overexpression. The transcription factor SOX11 serves as a crucial diagnostic marker, as it is expressed in the majority of MCLs, especially in all reported cyclin D1-negative MCLs. The novel mouse monoclonal SOX11-C1 antibody exhibits nuclear staining and provides enhanced sensitivity and specificity relative to earlier SOX11 antibodies in immunohistochemical detection of MCL. Moreover, flow cytometry examination of blood and tissue specimens utilizing SOX11-C1 may facilitate a practical method for the early diagnosis and monitoring of MCL patients. SOX11 expression has been demonstrated to be a good prognostic indicator in glioblastoma.

INTENDED USE -

Intended for in vitro diagnostic applications

SOX11 (M) is a mouse monoclonal antibody designated for professional laboratory application following the first tumor diagnosis.

Traditional histopathology used non-immunologic histochemical stains for the qualitative detection of SOX11 protein 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 tests by a qualified pathologist to assist in making further clinical determinations.

SUMMARY AND EXPLANATION -

SOX11 (SRY (Sex Determining Region Y)-Box 11) is a member of the SOX family of transcription factors, playing a role in the regulation of embryonic development and cell fate determination.

The diagnosis of mantle cell lymphoma (MCL) can be challenging, particularly in the absence of t(11;14) translocation and cyclin D1 overexpression. In these instances, the transcription factor SOX11 serves as a significant diagnostic marker, as it is expressed in the majority of MCLs, particularly in all known cyclin D1-negative MCLs. The novel mouse monoclonal SOX11-C1 antibody exhibits nuclear staining and provides enhanced sensitivity and specificity relative to earlier SOX11 antibodies in immunohistochemical detection of MCL. Moreover, flow cytometry examination of blood and tissue specimens utilizing SOX11-C1 may facilitate an efficient method for the early diagnosis and monitoring of MCL patients. SOX11 expression has been demonstrated to be a good prognostic indicator in glioblastoma.

PRINCIPLE OF PROCEDURE -

This antibody product can serve as the primary antibody in immunohistochemistry assays of formalin-fixed, paraffin-embedded tissue slices. Immunohistochemical (IHC) staining techniques facilitate the visualization of antigens through the sequential application of a specific primary antibody to the antigen, followed by a secondary antibody to the primary antibody (optional linking antibody/probe), an enzyme complex, and a chromogenic substrate, interspersed with washing steps. The enzymatic activation of the chromogen produces a visible reaction product at the antigen location. The specimen may thereafter be counterstained and covered with a slip. Results are analyzed with a light microscope and assist in the differential diagnosis of pathophysiological processes, which may or may not correlate with a specific antigen.

SOURCE - Mouse monoclonal

SPECIES REACTIVITY - Human; others not tested

CLONE - SOX11-C1

ISOTYPE - IgG1/kappa

PROTEIN CONCENTRATION - Call for specific Ig concentration

EPITOPE/ANTIGEN - SOX11

CELLULAR LOCALISATION - Nuclear method

POSITIVE TISSUE CONTROL - Normal Brain Tissue

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 - Buffered saline solution, pH 6.1-7.4, containing a protein carrier and less than 0.1% sodium azide 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- Normal Brain Tissue
- 2) Negative control tissue (internal or external)
- 3) Microscope slides and coverslips
- 4) Staining jars or baths
- 5) Timer
- 6) Xylene or xylene substitute
- 7) Ethanol or reagent alcohol
- 8) Deionized or distilled water
- 9) Heating equipment or enzyme for tissue pretreatment step
- 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.