SOX2

Format	Catalog No.	Pack size	Dilution
Concentrated	GB3109A,C	0.1, 1.0 mL	1:100
Prediluted	GB3109AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

The SOX2 gene encodes a protein belonging to the SRY-related HMG-box (SOX) family of transcription factors. SOX2 is expressed in multipotent neural stem cells and may facilitate the identification of cells capable of self-renewal and multipotent differentiation. SOX2 has been identified as a poor prognostic indicator linked to aggressive phenotypes in breast, head and neck, gastric, colorectal, and bladder cancers. In small cell lung tumors, SOX2 was associated with an unfavorable prognosis. In contrast, SOX2 is highly expressed in a significant proportion of lung squamous cell carcinomas and has been identified as an independent favorable prognostic indicator.

INTENDED USE -

SOX2 [BC36] is a mouse monoclonal antibody designed for laboratory application in the qualitative detection of SOX2 protein using immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical assessment of any staining or its absence must be supplemented by morphological analyses with appropriate controls and should be considered in conjunction with the patient's clinical history and other diagnostic evaluations by a certified pathologist.

SUMMARY AND EXPLANATION -

The SOX2 gene encodes a protein belonging to the SRY-related HMG-box (SOX) family of transcription factors. SOX2 is expressed in multipotent neural stem cells and may assist in identifying cells capable of self-renewal and multipotent differentiation. SOX2 has been identified as a poor prognostic indicator linked to aggressive phenotypes in breast, head and neck, gastric, colorectal, and bladder cancers. In small cell lung tumors, SOX2 was associated with an unfavorable prognosis. In contrast, SOX2 is highly expressed in a significant proportion of lung squamous cell carcinomas and has been identified as an independent favorable prognostic factor.

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 - BC36

ISOTYPE - IgG1/Kappa

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

EPITOPE/ANTIGEN - SOX 2

CELLULAR LOCALISATION - Nuclear

POSITIVE TISSUE CONTROL - Lung squamous cell carcinoma

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 - Lung squamous cell carcinoma
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.