GENE BIO SOLUTION

DESMIN

Format	Catalog no.	Pack size	Dilution
Concentrated	GB 036 A, B, C	0.1, 0.5, 1.0 mL	1:25
Prediluted	GB 036 AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

This monoclonal antibody [D33] identifies desmin, a 53 kDa intermediate filament protein. Research indicates that [D33] has good specificity for desmin and does not cross-react with other intermediate filament proteins. Research has demonstrated that D33 is effective in identifying cancers of myogenic origin, reacting with both leiomyosarcomas (smooth muscle) and rhabdomyosarcomas (striated muscle). Numerous studies have employed desmin in a panel to assist in the categorization of uterine sarcomas. Research on desmoplastic reaction in colorectal and pancreatic tumors has shown D33 to be an effective marker of tumor invasion.

INTENDED USE -

For In Vitro Diagnostic Applications Desmin [D33] is a mouse monoclonal antibody designed for laboratory application in the qualitative detection of desmin 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 -

Desmin identifies a 53 kDa intermediate filament protein known as desmin. Research indicates that this monoclonal antibody has good specificity for desmin and does not cross-react with other intermediate filament proteins. The desmin antibody interacts with both striated (skeletal and cardiac) and smooth muscle cells. In skeletal and cardiac muscles, the staining is restricted to the Z-bands, resulting in a distinctive striated appearance. The anti-desmin antibody is important in identifying cancers of myogenic origin. It interacts with leiomyosarcomas (smooth muscle) and rhabdomyosarcomas (striated muscle). Genebio’s D33 MAb is highly effective for staining formalin-fixed paraffin-embedded tissues.

PRINCIPLE OF PROCEDURE -

Antigen identification in tissues and cells is a multi-phase immunohistochemistry procedure. The first step attaches the primary antibody to its designated epitope. A secondary antibody may be utilized to bind the primary antibody, succeeded by an enzyme-labeled polymer; alternatively, an enzyme-labeled polymer may be immediately administered to bind the primary antibody. The identification of the bound primary antibody is demonstrated by an enzyme-catalyzed colorimetric reaction. SOURCE - Mouse monoclonal

SPECIES REACTIVITY - Human, mouse and rat

CLONE - D33

ISOTYPE - IgG1/kappa

EPITOPE/ANTIGEN - Desmin

CELLULAR LOCALISATION - Cytoplasmic

POSITIVE TISSUE CONTROL - Leiomyoma, leiomyosarcoma, rhabdomyosarcoma

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

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. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

Materials required but not provided -

1) Positivetissuecontrol-Leiomyoma,leiomyosarcoma,rhabdomyosarcoma
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.