Product Code:
MP-357-CMK01 (conc 0.1ml)
MP-357-CMK05 (conc 0.5ml)
MP-357-CMK1 (conc 1ml)
MP-357-PM6 (RTU 6ml)

Product Description:
Factor XIIIa
Concentrated and Prediluted Monoclonal Antibody
Control Number: 901-357-092508
ISO 9001:2000 CERTIFIED

Summary & Explanation
This is a monoclonal antibody to the A-subunit of human coagulation Factor XIII. It recognizes human Factor XIII A-chain in both reduced and non-reduced forms. It does not react with human Factor XIII B-chain or human Factor XII. Factor XIII is a betaglobulin found in plasma and is composed of two subunits. Factor XIII-A is the catalytic subunit and is a dimer of M.W. 160,000. Factor XIII is present in plasma as an alpha2beta2 heterodimer (M.W. 320,000); whereas in platelets, only the alpha2 unit exists. Factor XIIIa is a dermal dendrocyte marker and shows variable reaction with these types of tumors. It can be used for histiocytic phenotyping and has been reported to mark capillary hemangiomas and tumors of the central nervous system. Factor XIIIa has also been used with CD34 to differentiate between dermatofibroma and dermatofibrosarcoma protuberans.

Antigen detection, in tissues and cells, is a multi-step immunohistochemical process. The initial step binds the primary antibody to its specific epitope. After labelling the antigen with a primary antibody, a universal, affinity-purified, secondary antibody is added to bind to the primary antibody. An enzyme label is then added to bind to the secondary antibody; this detection of the bound antibody is evidenced by a colorimetric reaction.

Intended Use: For In Vitro Diagnostic Use

Source: Mouse monoclonal

Species Reactivity: Human; others not tested
Clone: E980.1

Isotype: IgG1

Epitope/Antigen: Factor XIIIa c-terminus

Positive Control: Capillary hemangioma, dermatofibroma, placenta or skin

Cellular Localization: Cytoplasmic

Normal Tissue: Skin, placenta

Abnormal Tissue: Dermatofibroma, xanthoma

Total Protein Concentration: ~10 mg/ml. Call for lot specific Ig Concentration.

Known Applications: Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

Supplied As: Buffer with protein carrier and preservative.

Sensitivity Enhancing Antibody Diluent B

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.
Instructions for Use:

**Endogenous Peroxidase Block**
If using an HRP system, block all endogenous peroxidase activity by incubating the sections for 5 minutes with the MenaPath Peroxide Block. Rinse slides in water, and then rinse well in buffer.

**Pretreatment Protocol:**
Retrieve sections with MenaPath Access Supreme Solution using the MenaPath Access Retrieval Unit followed by a wash in distilled water.

Alternatively, steam tissue sections for 45-60 minutes. Allow solution to cool for 20 minutes then wash in distilled water.

**Protein Block**
Incubate sections for 10-15 minutes at room temperature with the MenaPath Caesin Background Blocker.

**Primary Antibody**
Dilute 1:50-1:100 using MenaPath Sensitivity Enhancing Antibody Diluent B. Incubate sections for 30 minutes at room temperature. Rinse slides x3 with buffer. Do not dilute MP-357-PMK6 as it is ready to use.

**Universal Probe**
Incubate sections for 10-20 minutes at room temperature with the MenaPath X-Cell Plus Universal Probe. Rinse slides x3 with buffer.

**Polymer**
Incubate sections for 10-30 minutes at room temperature with the MenaPath X-Cell Plus Polymer. Rinse slides x3 in buffer.

**Chromogen**
Incubate sections for 5 minutes at room temperature with MenaPath Liquid Stable DAB or for 10 minutes if using MenaPath Fast Red. Rinse x3 with buffer.
Performance Characteristics: 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 MenaPath products. Ultimately, it is the responsibility of the investigator to determine optimal conditions. These products are tools that can be used for interpretation of morphological findings in conjunction with other diagnostic tests and pertinent clinical data by a qualified pathologist.

Quality Control: Refer to NCCLS Quality Assurance for Immunocytochemistry approved guidelines, December 1999 MM4-A Vol.19 No.26 for more information about Tissue Controls.

Precautions: This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN3) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for disease control, 1976, National Institute of Occupational Safety and Health, 1976)

Specimens, before and after fixation and all materials exposed to them, should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water.

Microbial contamination of reagents may result in an increase in nonspecific staining. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change. The MSDS is available upon request.

Troubleshooting: Follow the antibody specific protocol recommendations according to data sheet provided. If atypical results occur, contact Menarini’s Technical Service Helpline: on 01189 444130.
References:
2. Silverman JS, Tamsen A. High grade malignant fibrous histiocytomas have bimodal cycling populations of factor XIIIa + dendrophages and dedifferentiated mesenchymal cells possibly derived from CD34+ fibroblasts. Cell Vis 1998 Jan;5(1):73-76.