

PRODUCT INFORMATION SHEET

Mouse Monoclonal Antibody to Vimentin

Format: PURE RUO REF IQP-1101P Volume: 100µl

Description

Clone 9E7E7

Isotype Mouse IgG1
Specificity Vimentin

Alternative names

FLJ36605; VIM

Species Human

Immunogen Purified recombinant fragment of Vimentin expressed in E. Coli.

Mw N/A

Format Ascitic fluid containing 0.03% sodium azide.

Summary

Vimentin is the major subunit protein of the intermediate filaments of mesenchymal cells. It is believed to be involved with the intracellular transport of proteins between the nucleus and plasma membrane. Vimentin has been implicated to be involved in the rate of steroid synthesis via its role as a storage network for steroidogenic cholesterol containing lipid droplets. Vimentin phosphorylation by a protein kinase causes the breakdown of intermediate filaments and activation of an ATP and myosin light chain dependent contractile event. This results in cytoskeletal changes that facilitate the interaction of the lipid droplets within mitochondria, and subsequent transport of cholesterol to the organelles leading to an increase in steroid synthesis. Immunohistochemical staining for Vimentin is characteristic of sarcomas (of neural, muscle and fibroblast origin) compared to carcinomas which are generally negative. Melanomas, lymphomas and vascular tumors may all stain for Vimentin. Vimentin antibodies are thus of value in the differential diagnosis of undifferentiated neoplasms and malignant tumors. They are generally used with a panel of other antibodies including those recognising cytokeratins, lymphoid markers, S100, desmin and neurofilaments.

Applications ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000

Limitations

- 1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
- 2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
- 3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
- 4. Reagent data performance is based on EDTA-treated blood. Reagent performance can be affected by the use of other anticoagulants.

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Handling and Storage

Store the vials at 2-8 °C for a maximum of 2 weeks and store at -20 °C for longer term storage. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

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Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent.

Warning

All products contain sodium azide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

References

1.Seshadri, R., et al. Intl. J. Cancer 67: 353-356(1996)

2.Essa, T.M., et al. J. Egyptian Soc. Parasitol. 26:433-442(1996)

3.Chu, Y.W., et al. Amer.J. Pathol. 148: 63-69(1996)

Explanation of used symbols

Consult instructions for use

REF
Catalogue number
Sufficient for
Caution, consult accompanying document
Keep away from (sun)light
Biological risks
Temperature limitation (°C)

RUO
LOT
Batch code
Use by yyyy-mm-dd
Manufacturer

		Label - tandem	Ex -max (nm)	Em -max (nm)
P	PURE	purified material	F . CI	-
F	FITC	FITC	488	519
R	R-PE	PE DI O	488, 532	578
С	CyQ	PE-Cy5.18	488, 532	667
Α	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695



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