

MONOCLONAL ANTIBODY **Vimentin**

Cat. No.	Form	Quantity	Presentation
1919	Concentrated	1 ml	Liquid

- Clone** V9
- Isotype** IgG1 (mouse)
- Immunogen** Purified vimentin from porcine eye lens (1).
- Specificity** The antibody reacts with the vimentin 57 kDa intermediate filament protein. There is no cross-reaction with other intermediate filament proteins such as cytokeratin, desmin, neurofilaments and glial fibrillary acidic protein.
- Normal tissue: V9 antibody reacts with cells of mesenchymal origin. Fibroblasts, smooth muscle cells and endothelial cells are stained by this antibody. In normal tissues, some cells coexpress vimentin and their own specific intermediate filaments, e.g. the vascular smooth muscle cells contain vimentin and desmin; the glial cells contain vimentin and glial fibrillary acidic protein (1-8).
- Tumor tissues: Studies have shown that V9 reacts with a variety of tumors. Many of these coexpress other intermediate filaments, e.g. thyroid carcinomas and pleomorphic adenomas of the salivary glands express vimentin and cytokeratin (1-8).
- Staining pattern: cytoplasm
- Positive Control** Connective tissue from any organ.
- Applications** Studies by immunohisto and cytochemical staining of vimentin in undifferentiated tumors.
- Buffer** 2 mg/ml bovine serum albumin in phosphate buffered saline containing 0.1% sodium azide.
- Storage** The antibody should be stored at 2-8°C. Do not freeze.
- Recommended Procedure** V9 antibody is for use on cytological samples, frozen sections, and routinely fixed (B5, Bouin's, Dubosq-Brasil, Zenker's and formalin), paraffin-embedded tissue sections.
- Process immunostaining according to previously described methods (8). Vimentin antibody should be diluted to 1:50 prior to use and incubated on tissue sections for 60 minutes at room temperature.

September 18, 1995

MA003

FOR RESEARCH USE ONLY - NOT FOR USE IN DIAGNOSTIC PROCEDURES


IMMUNOTECH
 A COULTER COMPANY

 BP 177 - 13276 Marseille Cedex 9 - France
 Tel. (33) 4 91 17 27 00 - Fax (33) 4 91 41 43 59

Enzyme digestion is not recommended and may reduce the staining intensity.

References

- 1) Osborn, M., Debus, E., Weber, K., "Monoclonal antibodies specific for vimentin", 1984, Eur. J. Cell. Biol., **34**, 137-43.
- 2) Miettinen, M., Lehto, V.P., Virtanen, I., "Antibodies to intermediate filament proteins in the diagnosis and classification of human tumors", 1984, Ultrastruct. Pathol., **7**, 83-107.
- 3) Miettinen, M., Lehto, V.P., Virtanen, I., "Antibodies to intermediate filament proteins. The differential diagnosis of cutaneous tumors", 1985, Arch. Dermatol., **121**, 736-741.
- 4) Gatter, K.C., Dunnill M.S., Van Muijen, G.N.P., Mason, D.Y., "Human lung tumors may coexpress different classes of intermediate filaments", 1986, J. Clin. Pathol., **39**, 950-954.
- 5) Buley, I.D., Gatter, K.C., Heryet, A., Mason, D.Y., "Expression of intermediate filament proteins in normal and diseased thyroid glands", 1987, J. Clin. Pathol., **40**, 136-142.
- 6) Azumi, N., Battifora, H., "The distribution of vimentin and keratin in epithelial and nonepithelial neoplasms. A comprehensive immunohistochemical study on formalin and alcohol fixed tumors", 1987, Am. J. Clin. Pathol., **88**, 286-296.
- 7) Wick, M.R., Siegel, G.P., 1988, In Monoclonal antibodies in diagnostic immunohistochemistry, Marcel Dekker Inc. New York, USA, 71-92.
- 8) Leong, A.S.Y., "Immunohistochemistry: theoretical and practical aspects", 1993, In Applied Immunohistochemistry for the Surgical Pathologist, Leong A.S.Y. Ed., Edward Arnold, London, pp. 2-22.