

MOUSE ANTI-HUMAN VIMENTIN MONOCLONAL ANTIBODY

CATALOG NUMBER:	CBL202	QUANTITY:	50 µg
LOT NUMBER:			
CLONE NAME:	VIM 3B4	HOST/ISOTYPE:	Ms IgG _{2a}
BACKGROUND:	This antibody is positive with cells of mesenchymal derivation, including endothelial cells and certain smooth muscle cells of the vascular tract, fibroblasts, connective tissue, all types of blood cells, including thymocytes, interstitial and testicular Sertoli cells, ovarian follicle cells. It can also be used to detect coexpression of vimentin in combination with other intermediate filament proteins. VIM 3B4 has turned out to be the most avid monoclonal antibody to vimentin. Tumors specifically detected: sarcoma (including myosarcoma), lymphoma, melanoma. The binding region of monoclonal antibody VIM3B4 has been characterized by Bohn et al. (1992). According to these authors, the epitope has been localized on the alpha-helical part of vimentin (rod domain coil 2). Due to an aa substitution at position of aa 353 in murine vimentin (that could explain for the weak cross-reaction of the antibody with murine vimentin) they were able to narrow down the binding region around position 353. These findings were confirmed by truncation mutagenesis experiments using human vimentin (Rogers et al., 1995).		
SPECIFICITY:	The antibody is highly specific for the intermediate filament protein vimentin which is present in all cells of mesenchymal origin. Polypeptide reacting: MW 57 kDa intermediate filament protein (vimentin) of mesenchymal cells.		
APPLICATIONS:	<u>Western blot</u> <u>Immunohistochemistry:</u> 1:100; Frozen and paraffin-embedded tissue sections with a minimum of a one hour incubation (longer for paraffin); protease pretreatment is recommended for paraffin-embedded sections. <u>Immunofluorescence</u> <u>ELISA</u> <i>Optimal working dilutions must be determined by the end user.</i>		
SPECIES REACTIVITY:	Human, monkey, bovine, canine, chicken and amphibian. Weak mouse cross reactivity. Reactivity with other species has not been confirmed.		
IMMUNOGEN:	Vimentin (purified from bovine lens)		
CONTROL:	Positive in RD cells, glioma cells, fibroblasts (SV-80), and MDCK cell line		
PRESENTATION:	Protein A purified immunoglobulin presented as lyophilized material. Reconstitute with 1ml distilled water. Final solution is PBS, pH 7.4, containing 0.5% BSA and 0.09% sodium azide.		
STORAGE/HANDLING:	Maintain at 2°-8°C for up to 12 months from date of receipt.		
REFERENCES:	Yang, P. et al. (2005). A Disintegrin and Metalloprotease 21 (ADAM21) Is Associated with Neurogenesis and Axonal Growth in Developing and Adult Rodent CNS. <i>J Comp Neurol</i>.		



490:163-179.

Rogers, K.R. et al. (1995) Truncation mutagenesis of the non- α -helical carboxyterminal tail domain of vimentin reveals contributions to cellular localization but not to filament assembly. *Eur J Cell Biol.* **66**: 136-150.

Bohn, W. et al. (1992). *Exp. Cell Res.* **201**:1-7.

Kasper, M. et al. (1989). *Histochem.* **93**:93-103.

Heid, H. W. et al. (1988). *Differentiation* **37**:137-57.

Franke, W. W. & Moll, R. (1987). *Differentiation* **36**:145-63.

Important Note: During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 μ L or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.

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