

Product datasheet for **BM5508**

Vimentin Mouse Monoclonal Antibody [Clone ID: XL-VIM-14.13]

Product data:

Product Type:	Primary Antibodies
Clone Name:	XL-VIM-14.13
Applications:	IHC, WB
Recommended Dilution:	Immunohistochemistry on Frozen Sections. Western blotting. Immunoelectron Microscopy. <u>Dilution buffer:</u> 0.15 M PBS with 0.1% BSA and 0.09% Sodium Azide. <u>Working Diutions:</u> Ready-to-use for Immunohistochemistry.
Reactivity:	Amphibian, Fish
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Vimentin from cytoskeletal fraction of XLKE cells (cultured Xenopus laevis kidney epithelial cells).
Specificity:	Polypeptide Reacting: MW 53,325 (pI 4.95) intermediate filament protein (vimentin) of Xenopus laevis (epitope presumably located between amino acids 79-88 within rod domain). The antibody recognizes Vimentin of amphibia and fish, predominantly found in glial and white blood cells.
Formulation:	State: Supernatant State: Hybridoma Culture Supernatant Preservative: 0.09% Sodium Azide
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C.
Stability:	Shelf life: one year from despatch.
Database Link:	Q92155



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Background:

Vimentin is an intermediate filament protein which is present in all cells of mesenchymal origin. 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 recognizing cytokeratins, lymphoid markers, S100, desmin and neurofilaments.

Synonyms:

VIM