BT LAB
Bioassay Technology Laboratory

Optimize Your Research

Vimentin Monoclonal Antibody

Description

Product type	Antibody
Code	BT-MCA3257
Host	Mouse
Isotype	Mouse IgG1
Size	100μL, 50μL
Immunogen	Purified recombinant fragment of Vimentin (aa2-466) expressed in E. Coli.
Mol wt	54kDa
Species reactivity	Human,Monkey
Clonality	Monoclonal
Recommended application	WB,IHC
Concentration	N/A
Full name	N/A
Synonyms	VIM

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

Background

Vimentin, also know as VIM. It 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.

Recommended Dilution

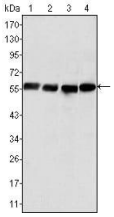
WB: 1:500 - 1:2000

IHC-p: 1:200 - 1:1000

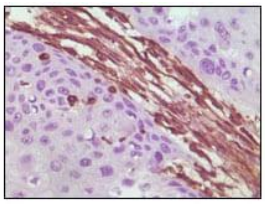
ELISA: 1:10000

Not yet tested in other applications.

Images



Western blot analysis using Vimentin mouse mAb against Hela (1), COS (2), HEK293 (3) and U20S (4) cell lysate.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue, showing cytoplasmic localization using Vimentin mouse mAb with DAB staining.

Storage

Store at 4°C short term. Aliquot and store at -20°C long term.

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