

**BP5101****Polyclonal Antibody to Vimentin - Serum****Alternate names:**

VIM

**Quantity:**

0.1 ml

**Background:**

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 with 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.

**Uniprot ID:**[P08670](#)**NCBI:**[NP\\_003371.2](#)**GeneID:**[7431](#)**Host:**

Guinea Pig

**Immunogen:**

Vimentin purified from calf lens

**Format:****State:** Liquid Stabilized Antiserum  
**Preservatives:** 0.09% Sodium Azide**Applications:**

**Immunoblotting:** 1/2000.  
**Immunohistochemistry on Frozen Sections:** 1/100.  
**Immunohistochemistry on Paraffin Sections:** 1/50.  
*Incubation Time:* 1 h at RT, extended with paraffin sections.  
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

Specific detection of Vimentin (Mr 57,000 polypeptide).  
**Tumors specifically detected:** Sarcoma (including myosarcoma), lymphoma, melanoma.

**Species Reactivity:**

**Tested:** Human, Bovine, Mouse.  
**Expected from sequence similarity:** Hamster, Chicken, Xenopus.

**Storage:**

Store undiluted at 2-8°C.  
**DO NOT FREEZE!**  
Shelf life: one year from despatch.

**General Readings:**

1. Magin TM, Bader BL, Freudenmann M, Franke WW. De novo formation of cytokeratin filaments in calf lens cells and cytoplasts after transfection with cDNAs or microinjection with mRNAs encoding human cytokeratins. *Eur J Cell Biol.* 1990 Dec;53(2):333-48. PubMed PMID: 1706999.
2. Boehnke K, Mirancea N, Pavesio A, Fusenig NE, Boukamp P, Stark HJ. Effects of fibroblasts and microenvironment on epidermal regeneration and tissue function in long-term skin equivalents. *Eur J Cell Biol.* 2007 Dec;86(11-12):731-46. Epub 2007 Feb 9. PubMed PMID: 17292509.