

<b>Cat. No:</b>	AB-83918
<b>Conjugate:</b>	Unconjugated
<b>Size:</b>	100 ug
<b>Clone:</b>	POLY
<b>Concentration:</b>	1mg/ml
<b>Host:</b>	Ch
<b>Isotype:</b>	IgY
<b>Immunogen:</b>	Full length recombinant human vimentin protein , PROT-r-Vim, expressed in and purified from E. coli. expressed in and purified from E. coli.
<b>Reactivity:</b>	Hu Rt Ms,Cw, Pg, Ho, Dg, Ch, Mk
<b>Applications:</b>	Western Blot: 1:5,000. Immunofluorescence: 1:2,500. Immunocytochemistry: 1:2,500 Immunohistochemistry (Frozen): 1:2,500
<b>Molecular Weight:</b>	50 kDa
<b>Purification:</b>	Purified

<b>Background:</b>	<p>Vimentin is a protein subunit of the intermediate or 10nm filaments found in the cytoplasm of many cell types (1). Intermediate filaments are relatively stable fibrous components of cells which appear to have primarily a mechanical function. Many cell lines such as HEK293, HeLa, 3T3 and Cos cells contain prominent vimentin networks (1). Vimentin is a major protein of eye lens and cornea, and found generally in mesenchymal tissues in adult mammals. In the CNS it is found in endothelia and developing neurons, developing and some mature astrocytes, microglia, mature Bergmann glia and ependyma (2,3). Mutations in the vimentin gene may cause cataracts (4,5), and elevated levels of vimentin in blood samples are associated with onset of cancer (6,7). Vimentin levels increase in a variety of cell types as they become cancerous, suggesting that increase in expression of this protein is a useful diagnostic marker of the epithelial-mesenchymal transition, an important step in the metastasis of carcinoma cells (8). The Vim antibody can be used to study stem cells and generally to reveal the intermediate filament cytoskeleton. The immunogen used to generate this antibody was full length recombinant human vimentin, PROT-r-Vim, expressed in and purified from E. coli. The antibody works well on all mammals tested to date, and it was generated in chicken by standard procedures and immunoglobulin was extracted from egg yolk. The resulting polyclonal antibody belongs to the IgY subclass, the chicken homolog of mammalian IgG and can be used in the same way, with the caveat that this type of antibody does not bind either Protein A or Protein G. Suitable second antibody reagents can be obtained from many vendors. The same vimentin immunogen was used to produce two high quality epitope mapped monoclonal antibodies to vimentin 2A52 and 2D1, and also a rabbit polyclonal antibody Vimentin.</p>
<b>Form:</b>	Liquid
<b>Buffer:</b>	Supplied as an aliquot of IgY preparation plus 5mM Na <sub>3</sub>
<b>Storage:</b>	Stable at 4°C for at least one year

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