

Basic Information

Product Name	Anti-Vimentin/VIM Antibody	
Gene Name	VIM	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human,mouse,rat	
Tested Application	WB,IHC,IF	
Contents	500 ug/ml antibody with PBS , 0.02% Na ₂ S ₂ O ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Vimentin (435-466aa DTHSKRTLIIKTIVETRDGQVINETSQHDDLE), identical to the related mouse and rat sequences.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	56KD	
Dilution Ratios	Western blot(WB): 1:1000-5000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunofluorescence (IF): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

VIM(vimentin) is also known as HEL113 or CTRCT30. This gene encodes a member of the intermediate filament family. Intermediate filaments, along with microtubules and actin microfilaments, make up the cytoskeleton. The protein encoded by this gene is responsible for maintaining cell shape, integrity of the cytoplasm, and stabilizing cytoskeletal interactions. It is also involved in the immune response, and controls the transport of low-density lipoprotein (LDL)-derived cholesterol from a lysosome to the site of esterification. It functions as an organizer of a number of critical proteins involved in attachment, migration, and cell signaling. Mutations in this gene causes a dominant, pulverulent cataract.

Reference

Anti-Vimentin/VIM Antibody被引用在7文献中。

Selected Validation Data

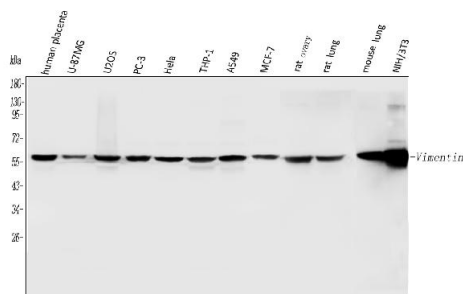


Figure 1. Western blot analysis of anti-Vimentin antibody (PB9359).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

Lane 2: human U-87MG whole cell lysates,

Lane 3: human U20S whole cell lysates,

Lane 4: human PC-3 whole cell lysates,

Lane 5: human Hela whole cell lysates,

Lane 6: human THP-1 whole cell lysates,

Lane 7: human A549 whole cell lysates,

Lane 8: human MCF-7 whole cell lysates,

Lane 9: rat ovary tissue lysates,

Lane 10: rat lung tissue lysates,

Lane 11: mouse lung tissue lysates,

Lane 12: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Vimentin antigen affinity purified polyclonal antibody (PB9359) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Vimentin at approximately 56 kDa. The expected band size for Vimentin is at 54 kDa.

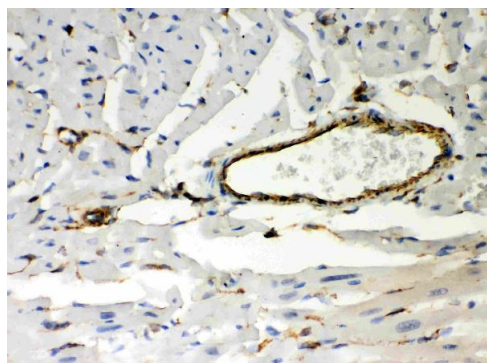


Figure 2. IHC analysis of Vimentin using anti-Vimentin antibody (PB9359).

Vimentin was detected in a paraffin-embedded section of mouse cardiac muscle tissue. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1022) as the chromogen.

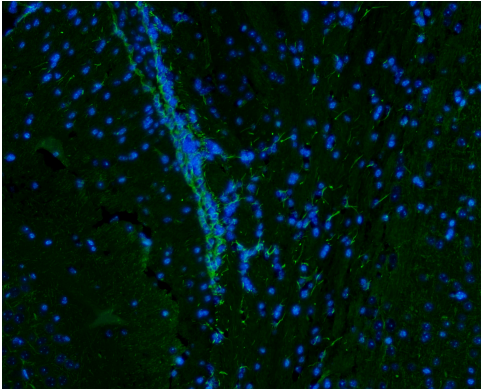


Figure 11. IF analysis of Vimentin using anti-Vimentin antibody (PB9359).

Vimentin was detected in a paraffin-embedded section of mouse brain tissue. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).