

## Vimentin Recombinant Rabbit Monoclonal Antibody Product Datasheet

Catalog# YX60005

Clone# BP6010

**Predicted Molecular Wt:** 54kDa  
**Species Cross-reactivity:** Human  
**Applications:** IHC-P

**Purity:** ProA affinity purified IgG  
**Form:** Liquid  
**Swissprot ID:** P08670

### Background:

Vimentin is the most common member of intermediate filament (IF) family and one of the main components in cytoskeleton structure. It is essential in the role of cell integrity and cytoskeletal stability. The reorganization of vimentin, similar to all IF proteins, occurs during different stages of the cell cycle and cell signaling by a site-specific phosphorylation (serine and threonine residues).

Vimentin is expressed in a wide variety of mesenchymal cell types: fibroblasts, endothelial cells etc., and in a number of other cell types derived from mesoderm, e.g., mesothelium and ovarian granulosa cells. However, in non-vascular smooth muscle cells, vimentin is often replaced by desmin. In striated muscle, vimentin is also replaced by desmin. However, during regeneration, vimentin is reexpressed. Cells of the lympho-haemopoietic system (lymphocytes, macrophages etc.) also express vimentin, sometimes in scarce amounts. In tumor tissues, it is present in many different neoplasms but is particularly expressed in those originated from mesenchymal cells.

In combination with a panel of antibodies, it is used to identify tumor with mesenchymal origin and malignant melanoma. Additionally, vimentin is a useful control marker for proper tissue processing.

### Subcellular location:

Cytoplasm

### Recommended method:

Heat induced epitope retrieval with Tris-EDTA buffer (pH 9.0), primary antibody incubate at RT (18°C-25°C) for 30 minutes.

### Immunogen:

Synthetic peptide corresponding to Vimentin residues within aa366-466 of Vimentin was used as an immunogen.

### Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

### Storage conditions:

-20°C

### Storage instructions:

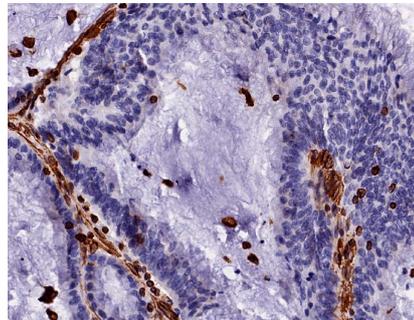
Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

### Recommended Dilutions:

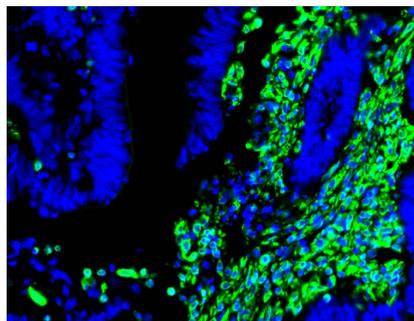
IHC-P: 1:100-1:200

### Background References:

1. Xiaotian Jia, et al, *Oncol Lett.* 2016 Sep; 12(3): 1717–1720.
2. Bo Su, et al, *Oncotarget.* 2016 Mar 1; 7(9): 10498–10512.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human carcinoma tissue labelling vimentin with BP6010. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0



Biotechnology  
Fluorescence multiplex immunohistochemical analysis of human carcinoma tissue (formalin-fixed paraffin-embedded section). The section was pretreated using heat mediated antigen retrieval with Tris/EDTA buffer (pH 9.0). Then incubated with YX60005 (green) at 1/600 dilution for 30mins at room temperature, followed by a further incubation with goat antimouse +rabbit HRP polymer (Yuanxibio, #A10011-30) at room temperature for 10mins. Then the section was labelled with Neon TSA 520 (Yuanxibio, #D110011) for 10mins. DAPI (blue) was used as a nuclear counter stain.

**For research use only. Not for use in diagnostic or therapeutic applications.**