For Research Use Only

Vimentin Polyclonal antibody

Catalog Number: 10366-1-AP

Featured Product

1437 Publications

GenBank Accession Number:



Basic Information

Catalog Number:

10366-1-AP BC000163 GeneID (NCBI):

150ul , Concentration: 500 $\mu g/ml$ by

Nanodrop: ENSEMBL Gene ID:

ENSG00000026025 Rabbit **UNIPROT ID:** Isotype P08670 IgG Full Name: Immunogen Catalog Number: vimentin AG0489 Calculated MW:

> 466 aa, 54 kDa Observed MW: 54 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions: WB 1:2000-1:10000 IHC 1:2500-1:10000 IF 1:50-1:500

Applications

Tested Applications:

WB, IF, FC, IHC, ELISA

Cited Applications:

WB, IP, IF, FC, IHC, CoIP, ELISA, Cell treatment

Species Specificity: human, mouse, rat **Cited Species:**

deer, human, rat, mouse, hamster, pig, bovine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, NIH/3T3 cells, Jurkat cells, mouse heart tissue

IHC: human liver cancer tissue, human breast cancer tissue, human liver tissue, human hepatocirrhosis tissue, human tonsillitis tissue

IF: HepG2 cells, human breast cancer tissue, human kidnev tissue

Background Information

Vimentin, also named as VIM, belongs to the intermediate filament family. Vimentin is class-III intermediate filaments found in various non-epithelial cells, especially mesenchymal cells. Vimentin is important for stabilizing the architecture of the cytoplasm. Monocyte-derived macrophages secrete vimentin into the extracellular space in vitro. Secretion of vimentin was enhanced by the proinflammatory cytokine tumor necrosis factor-alpha (TNFA; 191160) and inhibited by the antiinflammatory cytokine IL10 (124092), suggesting that vimentin is involved in the immune response. Vimentin has specialized functions that contribute to specific dynamic cellular processes. As a phosphoprotein, 55-60 kDa of vimentin proteins can be observed due to the different phosphorylation level. Isoforms of vimentin (49 kDa and 60 kDa) had also been reported. (PMID: 8640945, 22728585).

Notable Publications

Author	Pubmed ID	Journal	Application
Ji Xing	36230734	Cancers (Basel)	IHC,IF
Xia Peng	36247281	Am J Transl Res	WB
Mengru Xie	32999278	Int J Oral Sci	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

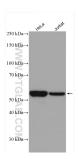
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

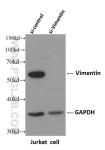
Selected Validation Data



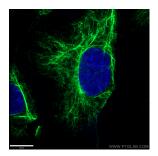
Various lysates were subjected to SDS PAGE followed by western blot with 10366-1-AP (Vimentin antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



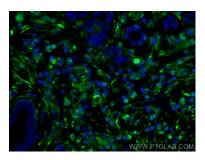
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 10366-1-AP (Vimentin antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



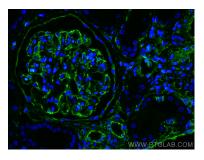
WB result of Vimentin antibody (10366-1-AP, 1:4000) with si-Control and si-Vimentin transfected Jurkat cells.



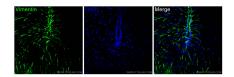
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 10366-1-AP (Vimentin antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



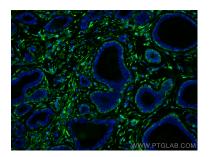
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using Vimentin antibody (10366-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L).



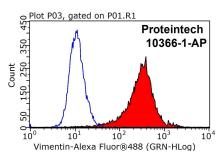
Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using Vimentin antibody (10366-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using 10366-1-AP (Vimentin antibody) at dilution of 1:400 and CoraLite488-Conjugated Affini Pure Goat Anti-Rabbit 1gG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using Vimentin antibody (10366-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 HeLa cells were stained with 0.2ug Vimentin antibody (10366-1-AP, red) and control antibody (blue). Cells were fixed with 4% PFA and permeabilized with 0.1% Triton X-100. Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.



Immunohistochemical analysis of paraffinembedded human hepatocirrhosis tissue slide using 10366-1-AP (Vimentin antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).