

Vimentin Antibody (S82)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2739a**Specification**

Vimentin Antibody (S82) - Product Information

Application	IF, WB, IHC-P,E
Primary Accession	P08670
Other Accession	P31000 , P20152 , O4R4X4 , P48670 , P48616 , O9MZA9
Reactivity	Human, Mouse
Predicted	Bovine, Hamster, Monkey, Rat, Sheep
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	63-90

Vimentin Antibody (S82) - Additional Information**Gene ID** 7431**Other Names**

Vimentin, VIM

Target/Specificity

This Vimentin antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 63-90 amino acids from human Vimentin.

Dilution

IF~~1:25

WB~~1:1000

IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Vimentin Antibody (S82) is for research use only and not for use in diagnostic or therapeutic procedures.

Vimentin Antibody (S82) - Protein Information**Name** VIM

Function Vimentins are class-III intermediate filaments found in various non-epithelial cells, especially mesenchymal cells. Vimentin is attached to the nucleus, endoplasmic reticulum, and mitochondria, either laterally or terminally.

Cellular Location

Cytoplasm. Cytoplasm, cytoskeleton. Nucleus matrix {ECO:0000250|UniProtKB:P31000}. Cell membrane {ECO:0000250|UniProtKB:P20152}

Tissue Location

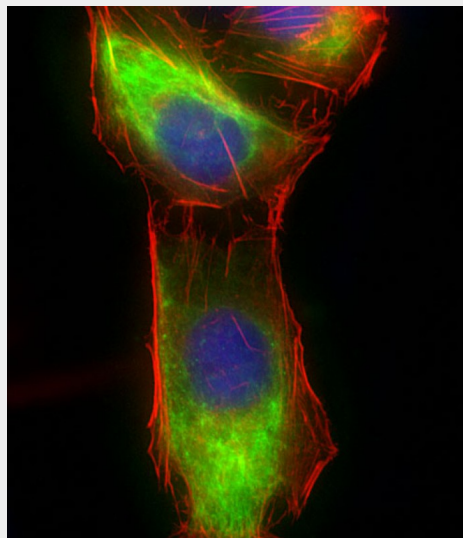
Highly expressed in fibroblasts, some expression in T- and B-lymphocytes, and little or no expression in Burkitt's lymphoma cell lines. Expressed in many hormone-independent mammary carcinoma cell lines.

Vimentin Antibody (S82) - Protocols

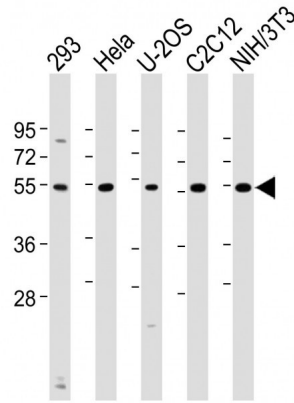
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

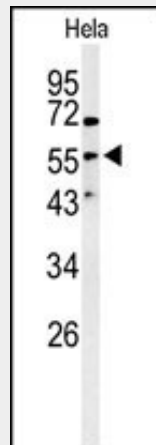
Vimentin Antibody (S82) - Images



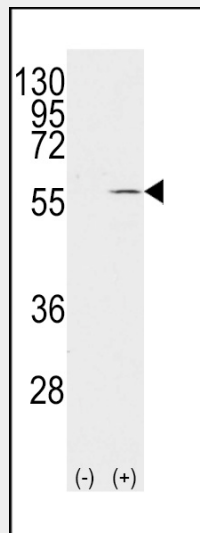
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (human osteosarcoma cell line) cells labeling Vimentin with AP2739a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm and weak nucleus staining on U-2 OS cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).



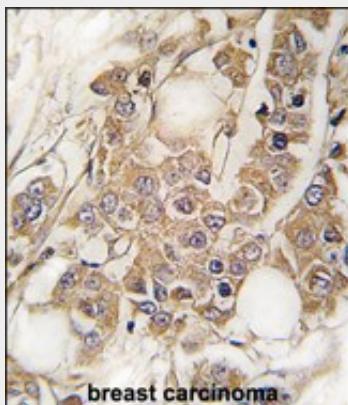
All lanes : Anti-Vimentin Antibody (S82) at 1:1000 dilution Lane 1: 293 whole cell lysate Lane 2: HeLa whole cell lysate Lane 3: U-2OS whole cell lysate Lane 4: C2C12 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot analysis of Vimentin-S82 (Cat. #AP2739a) in HeLa cell line lysates (35ug/lane). Vimentin (arrow) was detected using the purified Pab.



Western blot analysis of VIM(arrow) using rabbit polyclonal Vimentin Antibody (S82) (Cat.#AP2739a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the VIM gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with Vimentin Antibody (S82) (Cat.#AP2739a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Vimentin Antibody (S82) - Background

Along with the microfilaments (actins) and microtubules (tubulins), the intermediate filaments represent a third class of well-characterized cytoskeletal elements. The subunits display a tissue-specific pattern of expression. Desmin (MIM 125660) is the subunit specific for muscle and vimentin the subunit specific for mesenchymal tissue.

Vimentin Antibody (S82) - References

References for protein:

1. Whipple, R.A., Cancer Res. 68 (14), 5678-5688 (2008)
2. Garcia-Verdugo, I., Biochemistry 47 (18), 5127-5138 (2008)
3. Merdes, A., J. Cell Biol. 115 (2), 397-410 (1991)

References for SY5Y (SH-SY5Y; ATCC#CRL-2266): 1. Ross RA, et al. Coordinate morphological and biochemical interconversion of human neuroblastoma cells. J. Natl. Cancer Inst. 71: 741-749, 1983. [PubMed: 6137586]; 2. Biedler JL, et al. Multiple neurotransmitter synthesis by human neuroblastoma cell lines and clones. Cancer Res. 38: 3751-3757, 1978. [PubMed: 29704]

Vimentin Antibody (S82) - Citations

- [Isolation and feeder-free primary culture of four cell types from a single human skin sample](#)
- [Pirfenidone inhibits epithelial-mesenchymal transition in keloid keratinocytes](#)