

# Vimentin (C-20): sc-7557

## BACKGROUND

Cytoskeletal intermediate filaments (IFs) constitute a diverse group of proteins that are expressed in a highly tissue-specific manner. Intermediate filaments are constructed from two-chain,  $\alpha$ -helical, coiled-coil molecules arranged on an imperfect helical lattice and have been widely used as markers for distinguishing individual cell types within a tissue and identifying the origins of metastatic tumors. One such intermediate filament protein, Vimentin, is a general marker of cells originating in the mesenchyme. Vimentin is frequently coexpressed with other members of the intermediate filament family, such as the cytokeratins, in neoplasms including melanoma and breast carcinoma.

## CHROMOSOMAL LOCATION

Genetic locus: VIM (human) mapping to 10p13; Vim (mouse) mapping to 2 A1.

## SOURCE

Vimentin (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping C-terminus (h) of Vimentin of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7557 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Vimentin (C-20) is recommended for detection of Vimentin of mouse, rat, human and *Xenopus laevis* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Vimentin (C-20) is also recommended for detection of Vimentin in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Vimentin siRNA (h): sc-29522, Vimentin siRNA (m): sc-29523, Vimentin siRNA (r): sc-156015, Vimentin shRNA Plasmid (h): sc-29522-SH, Vimentin shRNA Plasmid (m): sc-29523-SH, Vimentin shRNA Plasmid (r): sc-156015-SH, Vimentin shRNA (h) Lentiviral Particles: sc-29522-V, Vimentin shRNA (m) Lentiviral Particles: sc-29523-V and Vimentin shRNA (r) Lentiviral Particles: sc-156015-V.

Molecular Weight of Vimentin: 57 kDa.

Positive Controls: SJRH30 cell lysate: sc-2287, KNRK whole cell lysate: sc-2214 or HeLa whole cell lysate: sc-2200.

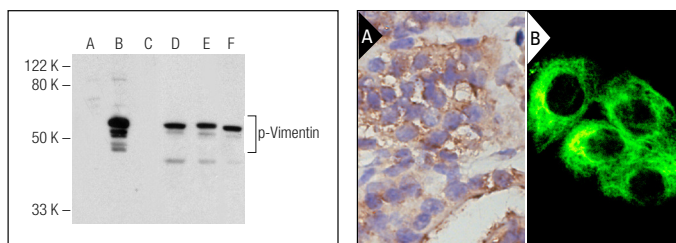
## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## DATA



Western blot analysis of Vimentin phosphorylation in untreated (A,D), induction cocktail (sc-362324) treated (B,E) and induction cocktail (sc-362324) and lambda protein phosphatase (sc-200312A) treated (C,F) HeLa whole cell lysates. Antibodies tested include p-Vimentin (Ser 83): sc-130610 (A,B,C) and Vimentin (C-20)-R: sc-7557-R (D,E,F).

Vimentin (C-20): sc-7557. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast tumor showing cytoplasmic staining (A). Immunofluorescence staining of methanol-fixed A10 cells showing cytoplasmic localization (B).

## SELECT PRODUCT CITATIONS

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- Adas, G., et al. 2011. Mesenchymal stem cells improve the healing of ischemic colonic anastomoses (experimental study). *Langenbecks Arch. Surg.* 396: 115-126.
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- Vincent, D.F., et al. 2012. Tif1 $\gamma$  suppresses murine pancreatic tumoral transformation by a Smad4-independent pathway. *Am. J. Pathol.* 180: 2214-2221.
- Alfaro-Lira, S., et al. 2012. Malignant transformation of rat kidney induced by environmental substances and estrogen. *Int. J. Environ Res. Public Health* 9: 1630-1648.



Try **Vimentin (V9): sc-6260** or **Vimentin (E-5): sc-373717**, our highly recommended monoclonal alternatives to Vimentin (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **Vimentin (V9): sc-6260**.