

Product Datasheet

Anti-Vimentin

Overview

Catalog # 2107-VIM

Host Species Mouse Monoclonal

 $\begin{tabular}{lll} Isotype & IgG_{2a} \\ \hline Clone & 2D1 \\ \hline \end{tabular}$

Format Protein G Purified

Applications WB 1:1000 IHC 1:500-1:1000 ICC 1:500-1:2000

Species Tested Human, Mouse, Rat

Expected Reactivity Bovine, Canine, Chicken, Drosophila, Feline, Finch, Fish, Goat, Guinea Pig, Hamster, Horse, Lizard,

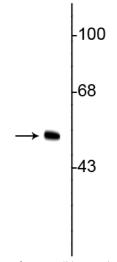
Non-Human Primate, Rabbit, Sheep, Vole, Xenopus, Zebrafish

Immunogen Recombinant human vimentin purified from *E. coli*.

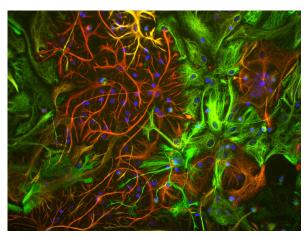
Molecular Weight 50 kDa

Cite this Antibody PhosphoSolutions Cat# 2107-VIM, RRID:AB_2492284

Images



Western blot of HeLa cell lysate showing specific immunolabeling of the $^{\sim}50~\mathrm{kDa}$ vimentin protein.



Mixed neuron/glial cultures stained with anti-vimentin (green, 1:500) and rabbit anti-GFAP antibody (cat #620-GFAP, red, 1:1000). The blue stains nuclear DNA. Vimentin is expressed alone in fibroblastic and endothelial cells, which are the flattened cells in the middle of the image which appear green. Astrocytes may express primarily GFAP, or GFAP and vimentin, and so appear red (GFAP only) or golden yellow (GFAP and Vimentin). In cells which express both GFAP and vimentin, the two proteins assemble to produce heteropolymer filaments.

Details

Target Description Vimentin is the major protein subunit of the 10nm or intermediate filaments (IFs) found in many

kinds of mesenchymal and epithelial cells as well as developing neuronal and astrocytic precursor

cells in the CNS. Vimentin is thought to be critically involved in lymphocyte adhesion and

transmigration (Nieminen M et al. 2006). Copolymers are frequently formed between vimentin and other IFs, such as GFAP (in many kinds of astrocytes), desmin (in muscle cells) and neurofilament proteins (in developing neurons). Antibodies to vimentin are useful in studies of stem cells and generally to reveal the filamentous cytoskeleton. Recent studies suggest that vimentin affects

prostate cancer cells motility and invasiveness (Zhao et al. 2008).

Specificity Specific for endogenous levels of the ~50 kDa vimentin protein.

Production/Purification Protein G purified culture supernatant.

Quality Control Western blots performed on each lot.

Buffer PBS + 10 mM NaN₃.

Storage Recommended that the undiluted antibody be aliquoted into smaller working volumes (10-30

μL/vial depending on usage) upon arrival and stored long term at -20° C or -80° C, while keeping a

working aliquot stored at 4° C for short term. Avoid freeze/thaw cycles.

Stability After date of receipt, stable for at least 1 year at -20°C.

Our Guarantee

As an original manufacturer, we are dedicated to creating quality and reproducible antibodies that further your research. We provide personalized customer support from the scientists that made the antibody and offer a free replacement or 100% refund if we cannot resolve an issue. Order today and experience **Antibodies that Work™**.

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