

Datasheet for 200-301-E54**Vimentin Antibody****Overview**

Description:	Anti-Vimentin (MOUSE) Monoclonal Antibody - 200-301-E54
Item No.:	200-301-E54
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat, Bovine
Host Species:	Mouse

Product Details

Background:	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. 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. Vimentin Antibody is ideal for researchers interested in neuroscience research.
Synonyms:	Vim, Vimentin Antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	2D1
Format:	IgG2a

Target Details

Gene Name:	VIM
Reactivity:	Human, Mouse, Rat, Bovine
Immunogen Type:	Recombinant Protein

Immunogen:	Anti-Vimentin Antibody was produced in mice by repeated immunizations with a recombinant human vimentin purified from E. coli.
Purity/Specificity:	Anti-Vimentin Antibody was purified from tissue culture supernatant by protein G chromatography.
Relevant Links:	• UniProtKB - P08670 • GeneID - 7431 • NCBI - NP_003371.2

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Vimentin Antibody is tested for Western Blot, immunocytochemistry, and immunohistochemistry, and it is specific for the ~50 kDa vimentin protein. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	1:500
IHC:	1:500-1:1000
WB:	1:1000

Formulation

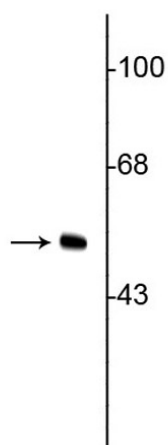
Physical State:	Liquid (sterile filtered)
Concentration:	titrated reagent
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Wet Ice
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Storage Condition:	Store vial at -20° C prior to opening in undiluted aliquots. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature.
Expiration:	Expiration date is one (1) year from date of receipt.

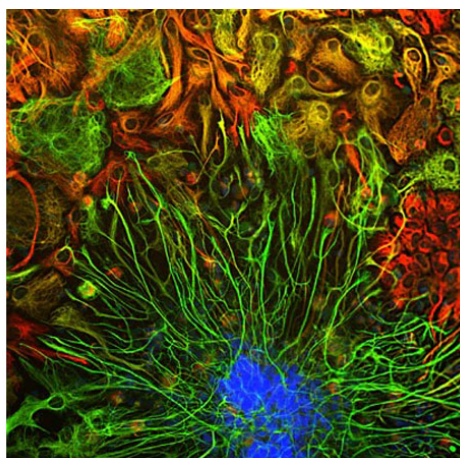
Images



Western Blot

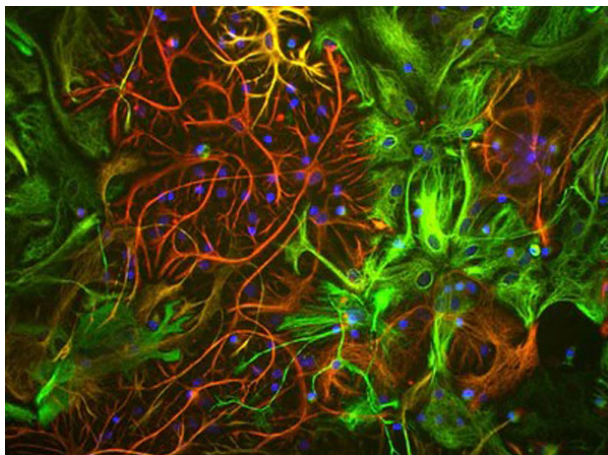
Western blot of anti-Vimentin.

HeLa cell lysate showing specific immunolabeling of the ~50 kDa vimentin protein.



Immunofluorescence Microscopy

Immunostaining of E20 rat cortical neuron/glial cell culture stained with anti-vimentin (p/n 200-301-E54, red, 1:2000) and anti-GFAP antibody (green, 1:5000). The blue is DAPI staining nuclear DNA. Vimentin is expressed alone in fibroblastic and developing cells and appear red. The astrocytes that appear red express only GFAP, while the golden yellow and yellow astrocytes express GFAP and Vimentin.

**Immunofluorescence Microscopy**

Mixed neuron/glia cultures stained with anti-vimentin (green, 1:500) and rabbit anti-GFAP antibody (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).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.