

Cell-Surface Vimentin (CSV) monoclonal antibody, clone 84-1

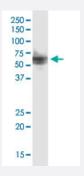
Catalog # H00007431-M08 Size 50 ug

Applications



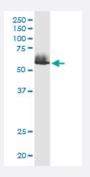
Western Blot (Cell lysate)

Cell-Surface Vimentin (CSV) monoclonal antibodody, clone 84-1. Western Blot analysis of VIM expression in MCF-7.



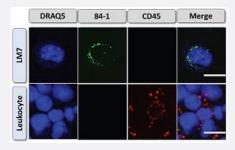
Western Blot (Cell lysate)

Cell-Surface Vimentin (CSV) monoclonal antibodody, clone 84-1. Western Blot analysis of VIM expression in MDA-MB-231.



Western Blot (Cell lysate)

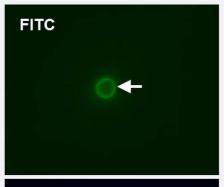
Cell-Surface Vimentin (CSV) monoclonal antibodody, clone 84-1. Western Blot analysis of VIM expression in SK-BR-3.



Immunofluorescence

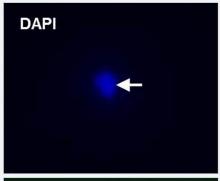
Immunofluorescence staining of CSV on isolated LM7 cancer cells and leukocytes using Cell-Surface Vimentin (CSV) monoclonal antibody, clone 84-1. The cells were co-stained against DRAQ5, CSV and CD45. (Satelli A., et al. Cancer Research 2014; 74:1645-1650)

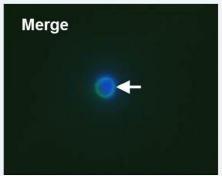




Immunofluorescence

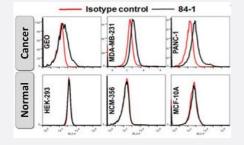
Immunofluorescence staining on non-fixed, non-permeabilized MDA-MB-231 cells using FITC conjugated Cell-Surface Vimentin (CSV) monoclonal antibody, clone 84-1 for CSV (Green) and DAPI for nucleus (Blue).











Specification	
Product Description	Mouse monoclonal antibody recognizes human cell-surface vimentin (CSV).
Immunogen	Human recombinant vimentin
Host	Mouse
Reactivity	Human



Product Information

Interspecies Antigen Sequence	Mouse (100); Rat (100)
Form	Liquid
Isotype	lgG2b, kappa
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Note	Cell-Surface Vimentin (CSV) detecting antibody is best used before cell fixation and permeabilization. If fixation is required, please use Abnova's <u>Special Fixative</u> .
	Cell-Surface Vimentin (CSV) antibody is a pending MD Anderson patent which has been exclusively licensed to Abnova Corporation.

Applications

Western Blot (Cell lysate)

Cell-Surface Vimentin (CSV) monoclonal antibodody, clone 84-1. Western Blot analysis of VIM expression in MCF-7.

Protocol Download

Western Blot (Cell lysate)

Cell-Surface Vimentin (CSV) monoclonal antibodody, clone 84-1. Western Blot analysis of VIM expression in MDA-MB-231.

Protocol Download

Western Blot (Cell lysate)

Cell-Surface Vimentin (CSV) monoclonal antibodody, clone 84-1. Western Blot analysis of VIM expression in SK-BR-3.

Protocol Download

Immunofluorescence

Immunofluorescence staining of CSV on isolated LM7 cancer cells and leukocytes using Cell-Surface Vimentin (CSV) monoclonal antibody, clone 84-1. The cells were co-stained against DRAQ5, CSV and CD45. (Satelli A., et al. Cancer Research 2014; 74:1645-1650)

Immunofluorescence

Immunofluorescence staining on non-fixed, non-permeabilized MDA-MB-231 cells using FITC conjugated Cell-Surface Vimentin (CSV) monoclonal antibody, clone 84-1 for CSV (Green) and DAPI for nucleus (Blue).



Flow Cytometry

Flow cytometric analysis of CSV expression in cancer (top) and normal (bottom) cell lines using Cell-Surface Vimentin (CSV) monoclonal antibody, clone 84-1. Isotype controls were used as negative controls. (Satelli A., et al., Clinical Cancer Research 2014; 21(4):899-906)

Gene Info — VIM	
Entrez GenelD	<u>7431</u>
Gene Name	VIM
Gene Alias	FLJ36605
Gene Description	vimentin
Omim ID	<u>193060</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene encodes a member of the intermediate filament family. Intermediate filamentents, along with microtubules and actin microfilaments, make up the cytoskeleton. The protein encoded by thi s gene is responsible for maintaining cell shape, integrity of the cytoplasm, and stabilizing cytoske letal interactions. It is also involved in the immune response, and controls the transport of low-dens ity lipoprotein (LDL)-derived cholesterol from a lysosome to the site of esterification. It functions a s an organizer of a number of critical proteins involved in attachment, migration, and cell signaling. Mutations in this gene causes a dominant, pulverulent cataract
Other Designations	OTTHUMP00000019224

Publication Reference

Glioblastoma Multiforme Selective Nanomedicines for Improved Anti-Cancer Treatments.

Jason Thomas Duskey, Arianna Rinaldi, Ilaria Ottonelli, Riccardo Caraffi, Chiara Alessia De Benedictis, Ann Katrin Sauer, Giovanni Tosi, Maria Angela Vandelli, Barbara Ruozi, Andreas Martin Grabrucker.

Pharmaceutics 2022 Jul; 14(7):1450.

Application: Immunogen, Rat, C6 cells

 Rare osteosarcoma cell subpopulation protein array and profiling using imaging mass cytometry and bioinformatics analysis.

Izhar S Batth, Qing Meng, Qi Wang, Keila E Torres, Jared Burks, Jing Wang, Richard Gorlick, Shulin Li.

BMC Cancer 2020 Jul; 20(1):715.

Application: IF, Human, Human circulating tumor cells, IMC cells, M36 cells, TC71 cells, PBMCs



Circulating tumor cells in whole process management of gastrointestinal stromal tumor in a real-life setting.

Zhang Q, Xu K, Chen M, Miao Y, Wang N, Xu Z, Xu H.

Scandinavian Journal of Gastroenterology 2020 May; 26(3):160.

Application: IF, Human, Human peripheral blood samples

 Improved Isolation of Mesenchymal Stem Cells Based on Interactions between N-Acetylglucosamine-Bearing Polymers and Cell-Surface Vimentin.

lse H, Matsunaga K, Shinohara M, Sakai Y.

Stem Cells International 2019 Nov; 2019:4341286.

Application: Flow Cyt, Rat, Rat bone marrow cells

mRNA and miRNA expression profiles in an ectoderm-biased substate of human pluripotent stem cells.

Mawaribuchi S, Aiki Y, Ikeda N, Ito Y.

Scientific Reports 2019 Aug; 9(1):11910.

Application: Flow Cyt, Human, H9 cell s

 LSD1 activation promotes inducible EMT programs and modulates the tumour microenvironment in breast cancer.

Boulding T, McCuaig RD, Tan A, Hardy K, Wu F, Dunn J, Kalimutho M, Sutton CR, Forwood JK, Bert AG, Goodall GJ, Malik L, Yip D, Dahlstrom JE, Zafar A, Khanna KK, Rao S.

Scientific Reports 2018 Jan; 8(1):73.

Application: IF, Human, MCF-7, MCF-7/PMA+ TGF-β, MDA-MB-231 cells

 Cell-surface Vimentin: A mislocalized protein for isolating csVimentin(+) CD133(-) novel stem-like hepatocellular carcinoma cells expressing EMT markers.

Mitra A, Satelli A, Xia X, Cutrera J, Mishra L, Li S.

International Journal of Cancer 2015 Jul; 137(2):491.

Application: Flow Cyt, Mouse, Liver tumor

Epithelial-mesenchymal transitioned circulating tumor cells capture for detecting tumor progression.

Satelli A, Mitra A, Brownlee Z, Xia X, Bellister S, Overman MJ, Kopetz S, Ellis LM, Meng QH, Li S.

Clinical Cancer Research 2015 Feb; 21(4):899.

Application: Flow Cyt, IF, Microbeads, Spiking assay, Human, Mouse, Cancers (breast, bladder, colorectal, liver), cancer cell lines (breast, liver, colon, brain, bladder, pancreas), normal cell lines (HEK-293, NCM-356, MCF-10A) cell lines



Product Information

 Circulating tumor cell enumeration with a combination of epithelial cell adhesion molecule- and cell-surface vimentin-based methods for monitoring breast cancer therapeutic response.

Satelli A, Brownlee Z, Mitra A, Meng QH, Li S.

Clinical Chemistry 2015 Jan; 61(1):259.

Application: IF-CTC, Microbeads, Human, Circulating tumor cells

Specific detection tool for mesenchymal and epithelial-mesenchymal transformed circulating tumor cells.

Arun Satelli, Shulin Li.

IFI CLAIMS Patent Services 2014 Sep; WO2014138183A1.

Application: Detection, Human, Mouse, Cancer cell lines (breast, liver, colon, brain, bone, bladder, pancreas)

Universal marker and detection tool for human sarcoma circulating tumor cells.

Satelli A, Mitra A, Cutrera JJ, Devarie M, Xia X, Ingram DR, Dibra D, Somaiah N, Torres KE, Ravi V, Ludwig JA, Kleinerman ES, Li S.

Cancer Research 2014 Mar; 74(6):1645.

Application: Flow Cyt, IF, IF-CTC, Microbeads, Spiking assay, Human, Mouse, Circulating tumor cells, HUVCE, HFOB, PBMC, LM7, RH41, SKNEB-2 cells

Disease

- Alzheimer disease
- Anorexia Nervosa
- Bulimia
- Cognition
- Genetic Predisposition to Disease