

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

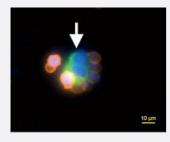
Catalog # H00007431-MF08 Size 50 ug

Applications



Immunofluorescence

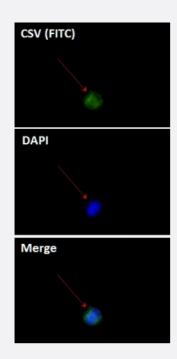
Immunofluorescence staining performed on CTCs from the patient recoverd by SuperSlide™. CSV was detected via green signal (FITC).



Immunofluorescence (Circulating Tumor Cell)

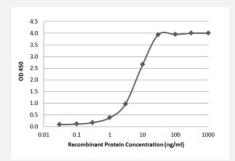
Representative images of EMT transformed CTC (white arrow) and WBC from prostate cancer patient. CSV EMT CTCs were detected by using immunofluorescence staining for CSV (FITC, green), CD45 (PE, orange) and Nucleus (Hoechst, blue).





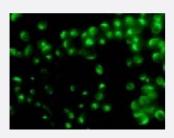
Immunofluorescence

Immunofluorescence staining on non-fixed, non-permeabilized CSV+EpCAM transfected 293T cells using FITC conjugated Cell-Surface Vimentin (CSV) monoclonal antibody, clone 84-1 for CSV (Green) and DAPI for nucleus (blue).



Sandwich ELISA

Sandwich ELISA performed with CSV recombinant protein and Cell-Surface Vimentin (CSV) monoclonal antibody (FITC)



Immunofluorescence

Immunofluorescence staining performed on PC-3 cells using Cell-Surface Vimentin (CSV) monoclonal antibody (FITC) (10 ug/mL).

Specification	
Product Description	FITC conjugated 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
Conjugation	FΠC
Isotype	lgG2b, kappa
Quality Control Testing	Results Sandwich ELISA Sandwich ELISA performed with CSV recombinant protein and Cell-Surface Vimentin (CSV) monocl onal antibody (FITC)
	Immunofluorescence Immunofluorescence staining performed on PC-3 cells using Cell-Surface Vimentin (CSV) monoclon al antibody (FITC) (10 ug/mL).
Recommend Usage	Immunofluorescence (10 ug/mL) LiquidCell™ SuperSlide™ (6 uL per slide)
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at 4°C in the dark.
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

- Flow Cytometry
- Immunofluorescence

Immunofluorescence staining performed on CTCs from the patient recoverd by SuperSlide™. CSV was detected via green signal (FITC).

Immunofluorescence (Circulating Tumor Cell)

Representative images of EMT transformed CTC (white arrow) and WBC from prostate cancer patient. CSV EMT CTCs were detected by using immunofluorescence staining for CSV (FITC, green), CD45 (PE, orange) and Nucleus (Hoechst, blue).

Immunofluorescence

Immunofluorescence staining on non-fixed, non-permeabilized CSV+EpCAM transfected 293T cells using FITC conjugated Cell-Surface Vimentin (CSV) monoclonal antibody, clone 84-1 for CSV (Green) and DAPI for nucleus (blue).



Gene Info — VIM	
Entrez GeneID	<u>7431</u>
Gene Name	VIM
Gene Alias	FLJ36605
Gene Description	vimentin
Omim ID	193060
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	OTTHUMP0000019224

Publication Reference

 Capture of Heterogeneous Circulating Tumor Cells in Colorectal Cancer Patients on an Immunomagnetic and Anti-Nonspecific Adsorption Platform.

Chenglin Li, Rui Li, Xueyuan Wu, Yifan Zuo, Guixiang Xiong, Meng Huang, Yuqing Sun, Rong Liao, Yang Xiao, Lili Hu, Chao Gao, Yanyan Yu.

Analytical Chemistry 2022 Nov; 94(44):15240.

Application: IF, Human, CTC

 Cell surface detection of vimentin, ACE2 and SARS-CoV-2 Spike proteins reveals selective colocalization at primary cilia.

Vasiliki Lalioti, Silvia González-Sanz, Irene Lois-Bermejo, Patricia González-Jiménez, Álvaro Viedma-Poyatos, Andrea Merino, María A Pajares, Dolores Pérez-Sala.

Scientific Reports 2022 Apr; 12(1):7063.

Application: IF, Human, A549 cells

Product Information



<u>Triple Selection Strategy for In Situ Labeling of Circulating Tumor Cells with High Purity and Viability toward</u>
 <u>Preclinical Personalized Drug Sensitivity Analysis.</u>

Hsuan-Yo Mu, Yen-Chuan Ou, Han-Ni Chuang, Tsai-Jung Lu, Pei-Pei Jhan, Tzu-Hung Hsiao, Jen-Huang Huang.

Advanced Biosystems 2020 Jun; 4(6):e2000013.

Application: IF, Human, A549 cells, CTC from prostate cancer patient

 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

 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)



Product Information

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