

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

Catalog # H00007431-MB08 Size 50 ug

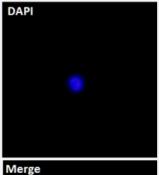
## **Applications**



### 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 PC3 cells using Biotin conjugated Cell-Surface Vimentin (CSV) monoclonal antibody, clone 84-1 plus Alexa Fluor 488 conjugated streptavidin for CSV (green) and DAPI for nucleus (blue).



Specification	
Product Description	Biotin conjugated mouse monoclonal antibody recognizes human cell-surface vimentin (CSV).
Immunogen	Human recombinant vimentin
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (100); Rat (100)
Form	Liquid
Conjugation	Biotin
Isotype	lgG2b, kappa
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -80°C in the dark. Aliquot to avoid repeated freezing and thawing.
Note	Cell-Surface Vimentin (CSV) detecting antibody is best used before cell fixation and permeabilizatio n. 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 (Circulating Tumor Cell)

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## Gene Info — VIM



### **Product Information**

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 this signet 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 signal 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**

• Comparison of circulating tumor cell (CTC) detection rates with epithelial cell adhesion molecule (EpCAM) and cell surface vimentin (CSV) antibodies in different solid tumors: a retrospective study.

Yang Gao, Wan-Hung Fan, Zhengbo Song, Haizhou Lou, Xixong Kang.

PeerJ 2021 Mar; 9:e10777.

Application: Flow Cyt, Human, Human circulating tumor cell

 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

### **Product Information**



• 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

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

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