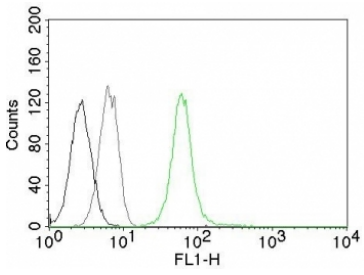
Vimentin Antibody [clone VM452] (V3935CF488)

Catalog No.	Formulation	Size
V3935CF488-100T	500 ul at 0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 Tests

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	CF488 Conjugate
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	VM452
Purity	Protein G affinity chromatography
UniProt	P08670
Applications	Flow Cytometry : 5ul per test per one 10^6 cells in 0.1ml or 5ul per 100ul of whole blood
Limitations	This Vimentin antibody is available for research use only.



Flow cytometry testing of permeabilized Jurkat cells with Vimentin antibody (clone VM452, green), cells alone (black) and isotype control (gray).

Description

Vimentin antibody CF488 conjugate is a directly labeled reagent for imaging vimentin, the type III intermediate filament that organizes the mesenchymal cytoskeleton. By coupling the VM452 specificity to a bright green fluorophore, this format enables one step staining to visualize filament networks that maintain cell integrity, guide organelle positioning, and support migration. Because EMT and stromal activation elevate vimentin, Vimentin antibody CF488 conjugate is widely used in cancer and fibrosis imaging workflows.

Vimentin filaments remodel as cells polarize and move, coordinating with actin stress fibers and microtubules to transmit forces and align adhesions. The CF488 label provides crisp filament definition for morphometric analysis, time lapse

studies of cytoskeletal dynamics, and multiplex panels with additional cellular markers. Eliminating a secondary antibody reduces background and shortens protocols without sacrificing specificity.

The Vimentin antibody CF488 conjugate clone VM452 has been referenced in peer reviewed imaging studies of tumor invasion, EMT signaling, and stromal biology. Researchers apply it to fixed tissues and cultured cells to map filament organization at the invasive front, assess fibroblast activation, and quantify cytoskeletal changes during mechanical stress. Its consistent performance supports reproducible quantitation across experiments and batches.

In translational contexts, direct fluorescence helps compare vimentin with epithelial markers to stratify tumor regions and to evaluate treatment effects that modulate mesenchymal programs. In developmental and repair models, this conjugate highlights mesenchymal lineages that orchestrate matrix deposition and tissue remodeling. Together these uses illustrate how labeled vimentin detection connects structure to function in living systems.

NSJ Bioreagents supplies this Vimentin antibody CF488 conjugate to support fluorescence based investigations of cytoskeletal architecture, EMT, and stromal activation. Alternate terms include VIM antibody, intermediate filament protein antibody, mesenchymal cell marker antibody, fibroblast marker antibody, and epithelial mesenchymal transition protein antibody.

Application Notes

Optimal dilution of the Vimentin antibody should be determined by the researcher.

Immunogen

Recombinant protein was used as the immunogen for the Vimentin antibody.

Storage

Store the Vimentin antibody at 2-8oC, protected from light.