

# Mouse Anti-Vimentin Monoclonal Antibody

Mouse, Monoclonal (Vimentin)

Cat. No. DMAB4511

Lot. No. (See product label)

## PRODUCT INFORMATION

**Product Overview:** Monoclonal Antibody to Vimentin Fluorescein conjugated

**Specificity:** Specific for the Mr 57,000 intermediate filament protein (vimentin) of mesenchymal cells.

The epitope has been localized on the alpha-helical part of vimentin (rod domain coil 2). Cross-reacts with human, monkey, bovine, dog, chicken and amphibia. Cell lines tested: RD cells, glioma cells, fibroblasts (SV-80), MDCK.

**Immunogen:** Vimentin (purified from bovine lens)

**Clone:** WIM4B5

**Isotype:** IgG<sub>2a</sub>

**Source:** Tissue culture

**Host animal:** Mouse

**Format:** FITC, Liquid

**Applications:** Suitable for use in Western blot, ELISA, immunofluorescence microscopy and immunocyto/histochemistry (frozen and paraffin-embedded). With paraffin-embedded sections, protease pretreatment is required prior to antibody application. Dilute at least 1:10 with PBS, pH 7.4 for immunohistochemical applications. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.

**Purification:** Protein A chromatography

**Affinity Constant:** Not determined

## REFERENCES

1. Rogers, K.R., et al., (1995), "Truncation mutagenesis of the non-alpha-helical carboxyterminal taildomain of vimentin reveals contributions to cellular localization but not to filament assembly", Eur. J. Cell Biol., 66, 136–150.
2. Bohn, W., et al., (1992), "Species-specific recognition patterns of monoclonal antibodies directed against vimentin", Exp. Cell Res., 201, 1–7.

## BACKGROUND

**Introduction:** Vimentins are class-III intermediate filaments found in various non-epithelial cells, especially mesenchymal cells. Vimentin is a type III intermediate filament (IF) protein that is expressed in mesenchymal cells. IF proteins are found in all metazoan cells as well as bacteria. IF, along with tubulin-based microtubules and actin-based microfilaments, comprise the cytoskeleton. All IF proteins are expressed in a highly developmentally-regulated fashion; vimentin is the major cytoskeletal component of mesenchymal cells. Because of this, vimentin is often used as a marker of mesenchymally-derived cells or cells undergoing an epithelial-to-mesenchymal transition (EMT) during both normal development and metastatic progression.

**Keywords:** FLJ36605; OTTHUMP00000019224; VIM; VIME; vimentin; Vimentin; VIM; FLJ36605

## PACKAGING

**Concentration:** Not applicable

**Buffer:** PBS, pH 7.4 containing 0.5% BSA

**Preservative:** 0.09% Sodium azide

**Storage:** Short-term store at 2–8°C. Long term, aliquot and store at -20°C. Avoid multiple freeze/thaw cycles.

**Warning:** This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1 – 1.0%. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

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