

## Purified anti-Vimentin

**Catalog # /** 3989010 / 100 µg  
**Size:** 3989005 / 25 µg

**Clone:** O91D3

**Isotype:** Mouse IgG2a

**Immunogen:** Full length human vimentin produced in *E. coli*.

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/mL

## Applications:

**Applications:** Intracellular Staining for Flow Cytometry, Immunocytochemistry

**Recommended Usage:** Each lot of this antibody is quality control tested by Western blotting. For Western blotting, the suggested use of this reagent is 0.25 - 2.5 µg per mL. For immunocytochemistry, a concentration range of 1.0 - 5.0 µg/mL is recommended. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µL volume. For immunohistochemistry on formalin-fixed paraffin-embedded tissue sections, a concentration range of 1.0 - 5.0 µg/mL is suggested. For immunohistochemistry on frozen tissue sections, a concentration range of 1.0 - 10.0 µg/mL is suggested. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** While this clone recognizes mouse Vimentin, we do not recommend its usage for western blot due to poor affinity of the antibody for the protein.

□ Total cell lysates (15 µg total protein) from Daudi (negative control), PC-3, Jurkat and NIH/3T3 cells were resolved by 4-12% Bis-Tris gel electrophoresis, transferred to a nitrocellulose membrane, and probed with 0.25 µg/mL (1:2000 dilution) of Purified

**Description:** Vimentin are class-III intermediate filaments found in various non-epithelial cells, especially mesenchymal cells. Vimentin is a widely expressed and highly conserved 54 kD protein that is constitutively expressed in mesenchymal cells, endothelial cells lining blood vessels, renal tubular cells, macrophages, neutrophils, fibroblasts, and leukocytes<sup>1,2</sup>. Vimentin is used as a marker of mesenchymal cells to distinguish them from epithelial cells<sup>3</sup>. Increased vimentin expression is frequently used as an EMT marker in cancer<sup>4</sup>. Autoantibodies to vimentin are commonly found in patients with autoimmune diseases such as Lupus<sup>5</sup> and rheumatoid arthritis<sup>6</sup>, and also found after transplantation<sup>7</sup>.

**Antigen**  
**References:**

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2. Fuchs E, *et al.* 1994. *Annu. Rev. Biochem.* 63:345.
3. Zeisberg M, *et al.* 2009. *J. Clin. Invest.* 119:1429.
4. Scanlon CS, *et al.* 2013. *J. Dent. Res.* 92:114.
5. Thebault S, *et al.* 2002. *J. Immunol.* 169:4046.
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7. Rose ML. 2013. *Hum. Immunol.* 74:1459.