## **Purified anti-Vimentin**

Catalog # / Size:	3989005 / 25 μg 3989010 / 100 μg
Clone:	O91D3
lsotype:	Mouse IgG2a
Immunogen:	Full length human vimentin produced in <i>E. coli</i> .
<b>Reactivity:</b>	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
- Each lot of this antibody is quality Recommended control tested by Western blotting. Usage: For Western blotting, the suggested use of this reagent is  $0.25 - 2.5 \ \mu g$ 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  $\leq 0.25 \,\mu g$  per million cells in 100 µL volume. For immunohistochemistry on formalinfixed 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  $\mu$ g/mL is suggested. It is recommended that the reagent be titrated for optimal performance for each application. Application While this clone recognizes mouse
  - **Notes:** 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	1. Kidd ME, et al. 2014. Am. J. Respir. Cell Mol. Biol. 50:1.
<b>References:</b>	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.

- 6. Vossenaar ER, et al. 2004. Arthritis Res. Ther. 6:R142.
- 7. Rose ML. 2013. Hum. Immunol. 74:1459.