

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DLL4 in direct ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 447506
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human DLL4 Ser27-Pro524 Accession # Q9NR61
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Immunocytochemistry	8-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Flow Cytometry</p>	<p>Detection of DLL4 in HUVEC Human Cells by Flow Cytometry. HUVEC human umbilical vein endothelial cells were stained with Rat Anti-Human DLL4 Monoclonal Antibody (Catalog # MAB1506, filled histogram) or isotype control antibody (Catalog # MAB006, open histogram), followed by Phycoerythrin-conjugated Anti-Rat IgG F(ab')₂ Secondary Antibody (Catalog # F0105B).</p>	<p>Immunocytochemistry</p>	<p>DLL4 in HUVEC Human Cells. DLL4 was detected in immersion fixed HUVEC human umbilical vein endothelial cells using Rat Anti-Human DLL4 Monoclonal Antibody (Catalog # MAB1506) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces and cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Delta-like ligand 4 (DLL4) is a transmembrane protein that contains one DSL domain and eight tandem EGF-like repeats. DLL4 is expressed on arterial endothelial cells where it signals through Notch 1 and Notch 4. DLL4 expression is induced by VEGF and regulates the proliferation of endothelial tip cells during vascular sprouting. DLL4 blockade as well as overexpression can suppress tumor growth by promoting dysregulated angiogenesis. Within the extracellular domain, human DLL4 shares 85% amino acid sequence identity with mouse and rat DLL4.