Human DLL1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1818

DESCRIPTION

Species Reactivity	Human
Specificity	Detects recombinant human DLL1 in direct ELISAs. In direct ELISAs, less than 1% cross-reactivity with recombinant human DLL4 and recombinant mouse DLL4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human DLL1 Ser22-Gly540 Accession # AAG09716
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.

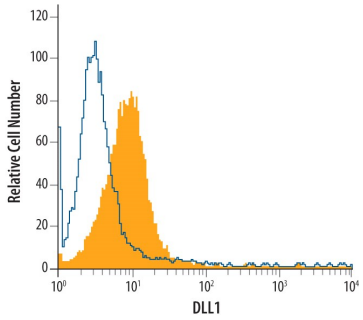
APPLICATIONS

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	1 µg/10^6 cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

Flow Cytometry



Detection of DLL1 in T98G Human Cell Line by Flow Cytometry. T98G human glioblastoma cell line was stained with Goat Anti-Human DLL1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1818, filled histogram) or control antibody (Catalog # AB-108-C, open histogram), followed by Phycoerythrin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0107).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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.** ● 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.

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BACKGROUND

Delta-like protein 1 (DLL1) is a 90-100 kDa type I transmembrane protein that belongs to the Delta/Serrate/Lag-2 (DSL) family of Notch ligands. Mature human DLL1 consists of a 528 amino acid (aa) extracellular domain (ECD) with one DSL domain and eight EGF-like repeats, a 23 aa transmembrane segment, and a 155 aa cytoplasmic domain (1). Within the ECD, human DLL1 shares 91% aa sequence identity with mouse and rat DLL1. It shares 26%, 37%, and 54% aa sequence identity with DLL2, 3, and 4, respectively. A 60 kDa ECD fragment released by ADAM9, 12, or 17 mediated proteolysis, promotes the proliferation of hematopoietic progenitor cells (2, 3). The residual membrane-bound portion of DLL1 can be cleaved by presenilin-dependent γ-secretase, enabling the cytoplasmic domain to migrate to the nucleus (4). DLL1 localizes to adherens junctions on neuronal processes through its association with the scaffolding protein MAGI1 (5). DLL1 is widely expressed, and it plays an important role in embryonic somite formation, cochlear hair cell differentiation, plus B and T lymphocyte differentiation (6-11). The upregulation of DLL1 in arterial endothelial cells following injury or angiogenic stimulation is central to postnatal arteriogenesis (12). DLL1 is also overexpressed in cervical carcinoma and glioma and contributes to tumor progression (1, 13).

References:

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