Human DLL1 Alexa Fluor® 647-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 251127

Catalog Number: FAB1818R

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects recombinant human DLL1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse DLL4 is observed.
Source	Monoclonal Mouse IgG_{2B} Clone # 251127
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human DLL1 Ser22-Gly540 Accession # AAG09716
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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	0.25-1 µg/10^6 cells	T98G human glioblastoma cell line

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

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).

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