

DESCRIPTION

Species Reactivity	Mouse/Rat
Specificity	Detects mouse and rat DLL1 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human (rh) DLL1 and less than 1% cross-reactivity with rhDLL3, rhDLL4, and recombinant mouse DLL4 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse DLL1 Ser22-Gln516 Accession # Q61483
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

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 in the Delta/Serrate/Lag-2 (DSL) family of Notch ligands. Mature mouse 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 154 aa cytoplasmic domain (1). Within the ECD, mouse DLL1 shares 91% and 95% aa sequence identity with human and rat DLL1, respectively. It shares 26%, 35%, and 51% 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, lymphocyte differentiation, and the maintenance of neural and myogenic progenitor cells (6-12). The upregulation of DLL1 in arterial endothelial cells following injury or angiogenic stimulation is central to postnatal arteriogenesis (13). DLL1 is also overexpressed in cervical carcinoma and glioma and contributes to tumor progression (14-15).

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