

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
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 as a 0.2 µm filtered solution in PBS.

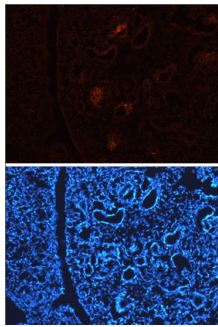
APPLICATIONS

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
Western Blot	0.1 µg/mL	Recombinant Mouse DLL1 Fc Chimera (Catalog # 5026-DL) Recombinant Rat DLL1 Fc Chimera (Catalog # 3970-DL)
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



DLL1 in Embryonic Mouse Kidney. DLL1 was detected in immersion fixed frozen sections of embryonic mouse kidney (E13.5) using 10 µg/mL Sheep Anti-Mouse/Rat DLL1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5026) overnight at 4 °C. Tissue was stained with the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red, upper panel; Catalog # NL010) and counterstained with DAPI (blue, lower panel). View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

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. <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 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).

References:

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