

### Product Data:

**Product SKU:** RPES3134

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** O00548

### Protein Information:

**Molecular Mass:** 57.3 kDa

**AP Molecular Mass:** 65 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Delta-like protein 1; Drosophila Delta homolog 1; Delta1; H-Delta; DLL1;DELTA1;DL1

## Immunogen Information:

**Sequence:** Gln18-Gly540

## Background:

Delta-like protein 1 (DLL1) is a type I transmembrane protein that belongs to the Delta/Serrate/Lag2 (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. Within the ECD, human DLL1 shares 91% aa sequence identity with mouse and rat DLL1. The residual membranebound portion of DLL1 can be cleaved by presenilin-dependent  $\gamma$ -secretase, enabling the cytoplasmic domain to migrate to the nucleus. DLL1 localizes to adherens junctions on neuronal processes through its association with the scaffolding protein MAGI1. DLL1 is widely expressed, and it plays an important role in embryonic somite formation, cochlear hair cell differentiation, plus B and T lymphocyte differentiation. The upregulation of DLL1 in arterial endothelial cells following injury or angiogenic stimulation is central to postnatal arteriogenesis. DLL1 is also overexpressed in cervical carcinoma and glioma and contributes to tumor progression.