Recombinant Protein Technical Manual

Recombinant Human DLL4 Protein (His Tag)

RPES3113

Product Data:

Product SKU: RPES3113

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q9NR61

Protein Information:

Molecular Mass: 55.7 kDa

AP Molecular Mass: 66 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℃, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 20mM Tris,150mM NaCl,pH8.0.

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

Application:

Synonyms: Delta-like protein 4; Drosophila Delta homolog 4; Delta4; DLL4

Immunogen Information:

Sequence: Ser27-Pro524

Background:

Delta-like protein 4 (DLL4) is a type I membrane protein belonging to the Delta/Serrate/Lag2 (DSL) family of Notch ligands. In mammals, four Notch homologs (Notch 1 to4) and five ligands (DLL 1, 3 and 4, Jagged 1 and 2) have been identified. DLL4 is expressed highly and selectively within the arterial endothelium and has been shown to function as a ligand for Notch 1 and Notch 4. Human and mouse DLL4 shares 86% amino acid sequence identity. Notch ligands are transmembrane proteins with a DSL motif necessary for Notch binding, tandem EGF repeats, a transmembrane region and a short intracellular domain (ICD). Notch ligands are categorized into two subfamilies based on the presence of an extracellular cysteinerich domain and insertions that interrupt some EGF repeats in the Jagged but not the Delta ligand family. Interactions of Notch receptors with their ligands result in reciprocal regulated intramembrane proteolysis (RIP). RIP is a mechanism for transmembrane signal transduction that involves the sequential processing by a disintegrin metalloprotease (ADAM) and then by presenilin/ γ secretase, resulting in shedding of the extracellular domains and the generation of the soluble ICD signaling fragments, respectively.