

Recombinant Human Delta-like Protein 4/DLL4 (C-Fc)

Catalog Number: PKSH034030

Note: Centrifuge before opening to ensure complete recovery of vial contents.

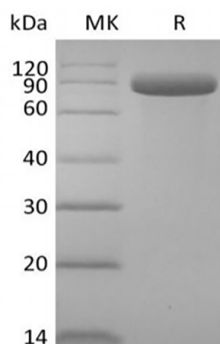
Description

Species	Human
Source	HEK293 Cells-derived Human Delta-like4;DLL4 protein Ser27-Pro524, with an C-terminal Fc
Calculated MW	81.2 kDa
Observed MW	85-100 kDa
Accession	Q9NR61
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°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 20mM Tris-HCl, 6% Trehalose, 4% Mannitol, 50mM NaCl, 0.05% Tween 80, pH8.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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 to 4) 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 cysteine-rich 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.