

Recombinant Human Notch2 (C-6His)

Catalog Number: PKSH034023

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

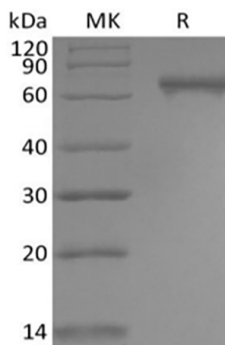
Description

Species	Human
Source	HEK293 Cells-derived Human Notch2 protein Leu26-Gln530, with an C-terminal His
Calculated MW	54.9 kDa
Observed MW	60-70 kDa
Accession	Q04721
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 PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Notch-2 is a 300 kDa type I transmembrane glycoprotein that is one of four human Notch homologues involved in developmental processes. Functions as a receptor for membrane-bound ligands Jagged-1 (JAG1), Jagged-2 (JAG2) and Delta-1 (DLL1) to regulate cell-fate determination. Human Notch-2 ECD (aa 26-530) shows 93%, 93%, 96% and 96% aa identity with the corresponding regions of mouse, rat, canine, and bovine Notch-2, respectively. Hajdu Cheney Syndrome (HCS) is a rare disease associated with mutations of NOTCH2 that lead to the translation of a truncated, presumably stable, NOTCH2 protein. NOTCH2 is down-regulated in colon cancer, and reduced expression is associated with a less differentiated, more aggressive phenotype, and reduced overall survival. NOTCH2 has also been shown to have pro-apoptotic and growth suppressive effects in thyroid carcinoma, and carcinoid tumors. NOTCH2 acts as an oncogene that promotes bladder cancer growth and metastasis through EMT, cell-cycle progression, and maintenance of stemness.