

### Synonym

NOTCH2,hN2,N2ECD

#### Source

Human NOTCH2, Fc Tag(NO2-H5255) is expressed from human 293 cells (HEK293). It contains AA Leu 26 - Gln 530 (Accession # Q04721-1). Predicted N-terminus: Leu 26

### **Molecular Characterization**

NOTCH2(Leu 26 - Gln 530) Fc(Pro 100 - Lys 330) Q04721-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 80.5 kDa. The protein migrates as 90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

## Storage

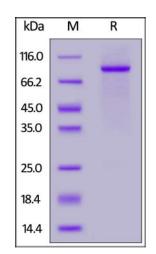
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

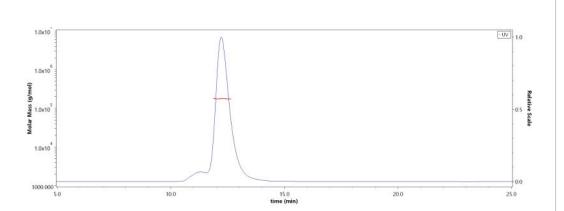
## **SDS-PAGE**



Human NOTCH2, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

# **Bioactivity-ELISA**

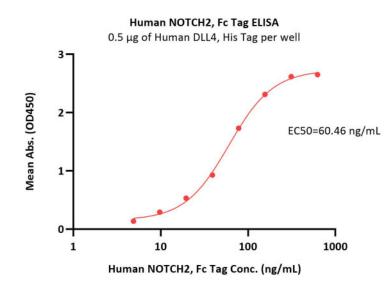
## SEC-MALS

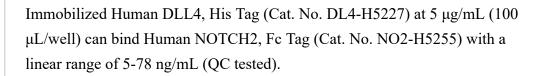


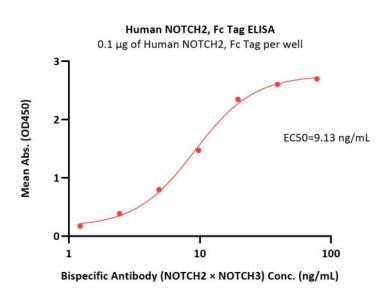
The purity of Human NOTCH2, Fc Tag (Cat. No. NO2-H5255) is more than 85% and the molecular weight of this protein is around 175-190 kDa verified by SEC-MALS.

Report



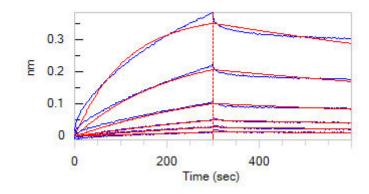






Immobilized Human NOTCH2, Fc Tag (Cat. No. NO2-H5255) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Bispecific Antibody (NOTCH2 × NOTCH3) with a linear range of 1-20 ng/mL (Routinely tested).

## **Bioactivity-BLI**



Loaded Human NOTCH2, Fc Tag (Cat. No. NO2-H5255) on Protein A Biosensor, can bind Human DLL4, His Tag (Cat. No. DL4-H5227) with an affinity constant of 77.6 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

## Background

Functions as a receptor for membrane-bound ligands Jagged-1 (JAG1), Jagged-2 (JAG2) and Delta-1 (DLL1) to regulate cell-fate determination. Upon ligand activation through the released notch intracellular domain (NICD) it forms a transcriptional activator complex with RBPJ/RBPSUH and activates genes of the enhancer of split locus . Affects the implementation of differentiation, proliferation and apoptotic programs (By similarity). Involved in bone remodeling and homeostasis. In collaboration with RELA/p65 enhances NFATc1 promoter activity and positively regulates RANKL-induced osteoclast differentiation . Positively regulates self-renewal of liver cancer cells .

## **Clinical and Translational Updates**

