# Recombinant Mouse Motch A/NOTCH1 Protein (His Tag)

**Catalog Number: PKSM040558**

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

## Description

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| **Species** | Mouse |
| **Source** | Baculovirus-Insect Cells-derived Mouse Motch A/NOTCH1 protein Met 1-Gln 526, with an C-terminal His |
| **Calculated MW** | 55.0 kDa |
| **Observed MW** | 80 kDa |
| **Accession** | NP_032740.3 |
| **Bio-activity** | 1. Immobilized human DLL4 at 10 μg/mL (100 μl/well) can bind biotinylated mouse NOTCH1-his, The $EC_{50}$ of biotinylated mouse NOTCH1-his is 40 ng/mL. 2. Immobilized mouse DLL4-his at 10 μg/mL (100 μl/well) can bind biotinylated mouse NOTCH1-his, The $EC_{50}$ of biotinylated mouse NOTCH1-his is 30 ng/mL. |

## Properties

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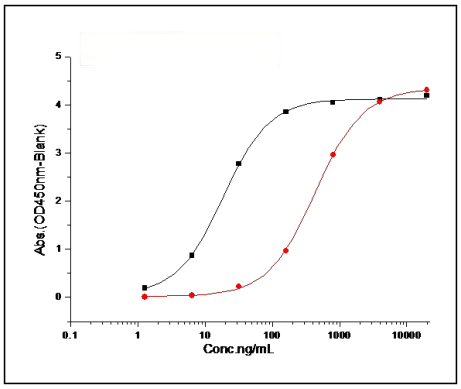
|---|---|
| **Purity** | > 82 % as determined by reducing SDS-PAGE. |
| **Endotoxin** | < 1.0 EU per μg of the protein as determined by the LAL method. |
| **Storage** | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored 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 sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual. |
| **Reconstitution** | Please refer to the printed manual for detailed information. |

## Data




Immobilized mouse DLL4-his (Cat: PKSM040570) at 10 μg/mL (100 μl/well) can bind biotinylated mouse NOTCH1-his, The $EC_{50}$ of biotinylated mouse NOTCH1-his is 30 ng/mL.

## Background

NOTCH1 is one of the four mammalian Notch receptors, which is involved in the Notch signaling pathway. Specifically, NOTCH1 promotes the proliferation of myogenic precursor cells, and the NICD domain of NOTCH1 can impair regeneration of skeletal muscles.NOTCH1 is a prevalent signaling pathway in T cell acute lymphoblastic leukemia (T-ALL).The NOTCH signaling pathway is a conserved signaling cascade that regulates many aspects of development and homeostasis in multiple organ systems.The proto-oncogene NOTCH1 is frequently mutated in around 1% of patients with chronic lymphocytic leukemia (CLL). NOTCH1 mutations in oral squamous cell carcinoma (OSCC) frequently occur near the ligand-binding region. These mutations change the domain structure of this protein and affect the ligand binding activity. When NOTCH1 is activated by ligand binding, NOTCH1 intracellular domain (NICD) is cleaved from the cell membrane.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