



# Recombinant Protein Technical Manual

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

RPES2064

### Product Data:

**Product SKU:** RPES2064

**Size:** 50µg

**Species:** Mouse

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** NP\_032740.3

### Protein Information:

**Molecular Mass:** 55 kDa

**AP Molecular Mass:** 80 kDa

**Tag:** C-His

**Bio-activity:** 1. Measured by its binding ability in a functional ELISA.2. Immobilized human DLL4 at 10 µg/mL (100 µl/well) can bind biotinylated mouse NOTCH1-his, The EC50 of biotinylated mouse NOTCH1-his is 40 ng/mL.3. Immobilized mouse DLL4-his at 10 µg/mL (100 µl/we

**Purity:** > 82 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** 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% gly

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

**Application:** Functional ELISA

**Synonyms:** Neurogenic locus notch homolog protein 1; Notch 1; Motch A; Mt14;lin2;Mis6;N1;Tan1

## Immunogen Information:

**Sequence:** Met 1-Gln 526

## 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.