# Rat NCAM1 / CD56 Protein (His Tag)

**Catalog Number:** **80399-R08H**

## General Information

**Gene Name Synonym:**

NCAM1

**Protein Construction:**

A DNA sequence encoding the rat NCAM1 (P13596-1) (Met1-Thr721) was expressed with a polyhistidine tag at the C-terminus.

**Source:** Rat

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** ≥ 95 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC.

**Endotoxin:**

< 1.0 EU per μg of the protein as determined by the LAL method

**Stability:**

Samples are stable for up to twelve months from date of receipt at -70 ℃

**Predicted N terminal:** Leu 20

**Molecular Mass:**

The recombinant rat NCAM1 comprises 713 amino acids and predicts a molecular mass of 79.2 kDa. The apparent molecular mass of the recombinant protein is approximately 114-118 kDa in SDS-PAGE under reducing conditions due to glycosylation.

**Formulation:**

Lyophilized from sterile 50?mM?Tris,?0.15M?NaCl,?pH?8.0.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

**Storage:**

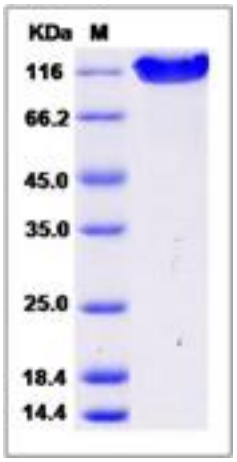
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

**Reconstitution:**

Detailed reconstitution instructions are sent along with the products.

**SDS-PAGE:**




## Protein Description

NCAM1, also known as CD56, is a neural adhesion protein (NCAM) which belongs to the immunoglobulin superfamily. NCAM is involved in neural development and in plasticity in the adult brain. UCHL1 is a novel interaction partner of both NCAM isoforms that regulates their ubiquitination and intracellular trafficking. NCAM1 is a cell adhesion molecule involved in neuron-neuron adhesion, neurite fasciculation, outgrowth of neurites, etc. NCAM1 has also been shown to be involved in the expansion of T cells and dendritic cells which play an important role in immune surveillance.

**References**

1.Reyes AA. et al., 1991, Mol Cell Biol. 11 (3): 1654-61. 2.Suzuki M. et al., 2003, J Biol Chem. 278 (49): 49459-68. 3.Becker C G. et al., 1996, J Neurosci Res. 45 (2): 143-52.