



# Recombinant Protein Technical Manual

## Recombinant Human NEGR1 Protein (His Tag)

RPES3158

### Product Data:

**Product SKU:** RPES3158

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_776169.2

### Protein Information:

**Molecular Mass:** 32.9 kDa

**AP Molecular Mass:** 45-48 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg 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 PBS, pH 7.4

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

**Application:**

**Synonyms:** DMML2433;IGLON4;KILON;Ntra

## Immunogen Information:

**Sequence:** Met 1-Gly 324

## Background:

Neuronal Growth Regulator 1, NEGR1, also known as neurotractin, or KILON, which belongs to the immunoglobulin superfamily, IgLON family. This GPI-linked cell surface glycoprotein NEGR1 is composed of three Ig-like domains and belongs to the IgLON subgroup of neural IgSF members. It is expressed in two isoforms with apparent molecular masses of 50 and 37 kD, termed L-form and S-form, respectively. NEGR1/Neurotractin participates in the regulation of neurite outgrowth in the developing brain, and is expressed on neurites of primary hippocampal neurons. Neurotractin/KILON is a trans-neural growth-promoting factor for outgrowing axons following hippocampal denervation. KILON (kindred of IgLON) and opioid-binding cell adhesion molecule belong to the IgLON subgroup of immunoglobulin superfamily together with the limbic system-associated membrane protein and neurotrimin. The alteration of modulatory function of KILON/NEGR1 for the number of dendritic synapses concomitant with changes in its localization and detergent solubility during neuronal culture development. In addition to its reported role in the brain, NEGR1 is also expressed in subcutaneous adipose tissue and acts as a central 'hub' in an obesity-related transcript network.