

Recombinant Protein Technical Manual Recombinant Human Neuroligin 1/NLGN1 Protein (His Tag) RPES0298

Product Data:

Product SKU: RPES0298 Size: 10μg

Species: Human Cells

Uniprot: Q8N2Q7-2

Protein Information:

Molecular Mass: 71.5 kDa

AP Molecular Mass: 104 kDa

Tag: C-6His

Bio-activity:

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

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ 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 a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

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

Application:

Synonyms: Neuroligin; NLGN1; KIAA1070;NL1

Immunogen Information:

Sequence: Gln46-Leu676

Background:

Neuroligin is a single-pass type I transmembrane protein which belongs to the type-B Carboxylesterase/Lipase family. Neuroligins are cell-adhesion molecules located at the postsynaptic side of the synapse. Neuroligins interact with beta-neurexins and this interaction is involved in the formation of functional synapses. Neurexins and Neuroligins are cell adhesion molecules present in excitatory and inhibitory synapses, and they are required for correct neuron network function. These proteins are found at the presynaptic and postsynaptic membranes. Neuroligin is a neuronal cell surface protein which is thought to be involved in cell-cell-interactions by forming intercellular junctions through binding to beta-neurexins. It seems to play role in formation or maintenance of synaptic junctions. It triggers the de novo formation of presynaptic structures and may be involved in specification of excitatory synapses.