

Recombinant Mouse Neuroligin 1/NLGN1 Protein (His Tag)

Catalog No. PKSM040520

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

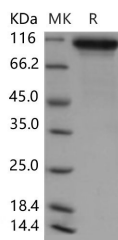
Description

Synonyms	6330415N05Rik;BB179718;mKIAA1070;NL1;Nlg1
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met 1-Ser 697
Accession	Q99K10-1
Calculated Molecular Weight	73.5 kDa
Observed molecular weight	100-110 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 97 % 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 PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

Background

Neuroligin 1 (NLGN1) belongs to the type-B carboxylesterase/lipase family, is a synaptic cell-adhesion molecule that is enriched in postsynaptic densities where it may recruit receptors, channels, and signal-transduction molecules to synaptic

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sites of cell adhesion. Neuroligins consist of five members (NLGN1, NLGN2, NLGN3, NLGN4 and NLGN4Y), which interact with beta-neurexins and this interaction is involved in the formation of functional synapses. The extracellular domain of functional Neuroligin 1 associates as a dimer when analyzed by sedimentation equilibrium. Neuroligin 1 has a unique N-linked glycosylation pattern in the neuroligin family, and glycosylation and its processing modify neuroligin activity. Neuroligin 1 is a potent trigger for the de novo formation of synaptic connections, and it has recently been suggested that it is required for the maturation of functionally competent excitatory synapses. The persistent expression of Neuroligin 1 is required for the maintenance of NMDAR-mediated synaptic transmission, which enables normal development of synaptic plasticity and long-term memory in the amygdala of adult animals.