



Recombinant Protein Technical Manual
Recombinant Human NETO1/BTCL1 Protein (His Tag)
RPES1032

Product Data:

Product SKU: RPES1032

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_620416.1

Protein Information:

Molecular Mass: 38 kDa

AP Molecular Mass: 46 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: BCTL1;BTCL1

Immunogen Information:

Sequence: Met 1-Thr 344

Background:

Neuropilin tolloid-like 1 (NETO1), a complement C1r/C1s, Uegf, Bmp1 (CUB) domain-containing transmembrane protein, is a novel component of the NMDAR complex critical for maintaining the abundance of NR2A-containing NMDARs in the postsynaptic density. The N-methyl-D-aspartate receptor (NMDAR), a major excitatory ligand-gated ion channel in the central nervous system (CNS), is a principal mediator of synaptic plasticity. Both NETO1 and NETO2 share an identical and unique domain structure thus representing a novel subfamily of CUB- and LDLa-containing proteins. The cytoplasmic domains of NETO1 and NETO2 are not homologous to other known protein sequences but contain a conserved FXNPXY-like motif, which is essential for the internalization of clathrin coated pits during endocytosis or alternatively, may be implicated in intracellular signaling pathways. NETO1 and NETO2, have marked effects on receptor properties, increasing further the potential diversity of Kainate receptors (KARs) functional properties. NETO1 involves in the development and/or maintenance of neuronal circuitry. NETO1 regulates long-term NMDA receptor-dependent synaptic plasticity and cognition, at least in the context of spatial learning and memory.