



Recombinant Protein Technical Manual

Recombinant Human STXBP1/UNC18A Protein (His & GST Tag)

RPES0803

Product Data:

Product SKU: RPES0803

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: P61764

Protein Information:

Molecular Mass: 95.4 kDa

AP Molecular Mass: 80 kDa

Tag: N-His & GST

Bio-activity:

Purity: > 85 % 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 20mM Tris, 500mM NaCl, 0.5mM PMSF, 10% gly, pH 8.0

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

Application:

Synonyms: MUNC18;NSEC1;P67;RBSEC1;UNC18

Immunogen Information:

Sequence: Met 1-Ser 594

Background:

Syntaxin-binding protein 1, also known as N-Sec1, Protein unc8 homolog 1, MUNC18 and STXBP1, is a peripheral membrane protein which belongs to the STXBP / unc8 / SEC1 family. STXBP1 is an evolutionally conserved neuronal Sec1/Munc8 (SM) protein that is essential in synaptic vesicle release in several species. It may participate in the regulation of synaptic vesicle docking and fusion, possibly through interaction with GTP-binding proteins. STXBP1 is essential for neurotransmission and binds syntaxin, a component of the synaptic vesicle fusion machinery probably in a 1:1 ratio. It can interact with syntaxins 1, 2, and 3 but not syntaxin 4. STXBP1 may also play a role in determining the specificity of intracellular fusion reactions. Defects in STXBP1 are the cause of epileptic encephalopathy early infantile type 4 (EIEE4). Affected individuals have neonatal or infantile onset of seizures, suppression-burst pattern on EEG, profound mental retardation, and MRI evidence of hypomyelination.