

Recombinant Human SNAP25 protein (His Tag)

Catalog Number: PDEH100980

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

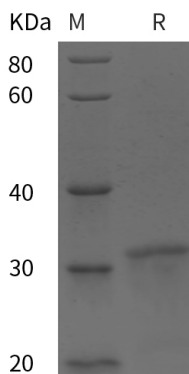
Description

Species	Human
Source	E.coli-derived Human SNAP25 protein Met1-Gly206, with an N-terminal His & C-terminal His
Calculated MW	22.6 kDa
Observed MW	31 kDa
Accession	P60880-2
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg 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 a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Synaptosomal-associated protein 25, also known as Super protein, Synaptosomal-associated 25 kDa protein, SNAP25 and SNAP, is a cytoplasm and cell membrane protein which belongs to the SNAP-25 family. SNAP25 / SUP contains 2 SNARE coiled-coil homology domains. SNAP25 / SUP is a membrane bound protein anchored to the cytosolic face of membranes via palmitoyl side chains in the middle of the molecule. SNAP25 / SUP protein is a component of the SNARE complex, which is proposed to account for the specificity of membrane fusion and to directly execute fusion by forming a tight complex that brings the synaptic vesicle and plasma membranes together. SNAP25 / SUP is a Q-SNARE protein contributing two α -helices in the formation of the exocytotic fusion complex in neurons where it assembles with syntaxin-1 and synaptobrevin. SNAP25 / SUP is involved in the molecular regulation of neurotransmitter release. It may play an important role in the synaptic function of specific neuronal systems. SNAP25 / SUP associates with proteins involved in vesicle docking and membrane fusion. SNAP25 / SUP regulates plasma membrane recycling through its interaction with CENPF. SNAP25 / SUP inhibits P/Q- and L-type voltage-gated calcium channels located presynaptically and interacts with the synaptotagmin C2B domain in Ca^{2+} -independent fashion. In glutamatergic synapses SNAP25 / SUP decreases the Ca^{2+} responsiveness, while it is naturally absent in GABAergic synapses.