

32-5017: Recombinant Human Synaptotagmin I

Alternative Name : Synaptotagmin-1, Synaptotagmin I, Syt1, p65, SYT1, SVP65, SYT.

Description

Source : Escherichia Coli. SYT1 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 256 amino acids (136-382 a.a) and having a molecular mass of 29.5kDa. SYT1 is fused to an 8 amino acid His-tag at C-terminus & purified by proprietary chromatographic techniques. Synaptotagmin-1 (SYT1) is a member of the synaptotagmin family, which contains two C2 domains. The synaptotagmins are integral membrane proteins of synaptic vesicles assumed to function as Ca²⁺ sensors in the process of vesicular trafficking and exocytosis. SYT1 is the principal regulator responsible for allowing the human brain to release neurotransmitters. SYT1 may have a regulatory role in the membrane interactions during trafficking of synaptic vesicles at the active zone of the synapse. SYT1 binds acidic phospholipids with a specificity which entails the presence of both an acidic head group and a diacyl backbone. SYT1 can also bind to at least 3 additional proteins in a Ca²⁺-independent manner; these being neurexins, syntaxin and AP2.

Product Info

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| Amount : | 5 µg |
| Purification : | Greater than 85.0% as determined by SDS-PAGE. |
| Content : | SYT1 protein solution (0.25mg/ml) containing 20mM Tris-HCl buffer (pH 8.0), 2mM DTT, 20% glycerol and 100mM NaCl. |
| Storage condition : | Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles. |
| Amino Acid : | MEPKEEEKLG KLYSLDYDF QNNQLLVGII QAAELPALDM GGTSDPYVKV FLLPDKKKKF ETKVHRKTLN PVFNEQFTFK VPYSELGGKT LVMAVYDFDR FSKHDIIGEF KVPMNTVDFG HVTEEWRDLQ SAEKEEQEKL GDICFSLRYV PTAGKLTVVI LEAKNLKKMD VGGLSDPYVK IHLMQNGKRL KKKKTTIKKN TLNPPYNESF SFEVPEFIQ KVQVVTVLD YDKIGKNDI GKVFVGYNLE HHHHHH. |

