**Product Name:** ANTI-SYNAPTOTAGMIN 1 ANTIBODY

**Product Code:** P40032-100

**Pack Size:** 100 µL

**Description:** Synaptotagmin 1 is a synaptic vesicle membrane glycoprotein that is widely expressed throughout the CNS and is generally thought to act as the Ca$^{2+}$ sensor in the regulation of exocytosis and neurotransmitter release (Littleton and Bellen 1995). Recent studies indicate that synaptotagmin’s Ca$^{2+}$ mediated binding of SNAP25 is essential for the Ca$^{2+}$ dependent triggering of membrane fusion (Zhang et al., 2002). It has recently been demonstrated that discrete residues within the c(2)b binding domain of synaptotagmin 1 independently specify endocytic rate and synaptic vesicle size (Poskanzer et al., 2006).

**Host Species:** Rabbit (Polyclonal)

**Mr (kDa):** 65

**Immunogen:** Synthetic peptide corresponding to amino acid residues within the synaptotagmin 1 protein.

**Species Reactivity:** The antibody has been directly tested for reactivity in Western blots with rat tissue. It is anticipated that the antibody will react with human, mouse, bovine, chicken and non-human primate tissues based on the fact that these species have 100% homology with the amino acid sequence used as antigen.

**Recommended Antibody Dilutions:**

- **WB:** 1:1000

**Physical State:** Liquid; Buffer contents: 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per mL BSA and 50% glycerol

**Storage/Stability:** Stable at -20 °C for at least 1 year. For long term storage -20 °C is recommended

**Purification Method:** Prepared from rabbit serum by affinity purification using a column to which the peptide immunogen was coupled.

**Shipping Conditions:**
- Domestic: Blue Ice
- International: Blue Ice or Dry Ice

**Synaptotagmin Western Blot**

Rat cortex lysate showing specific labeling of the ~65k synaptotagmin protein.

**References:**

Application Key: WB – Western Blot  IF – Immunofluorescence  IHC – Immunohistochemistry  IP - Immunoprecipitation

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