PRODUCT DATA SHEET

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).

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

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.
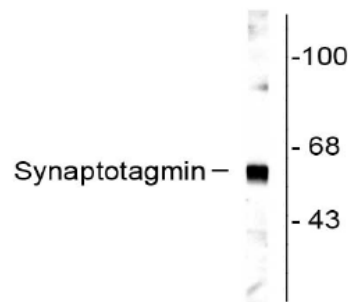
Recommended Antibody Dilutions:

WB: **1:1000**

References:
1) Littleton JT et al. (1995) *Trends Neurosci* 18(4):177-83.
2) Zhang X et al. (2002) *Neuron* 34(4):599-611.
3) Poskanzer KE et al. (2006) *Neuron* 50(1):49-62.

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

Application Key: WB – Western Blot IF – Immunofluorescence IHC – Immunohistochemistry IP - Immunoprecipitation
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P/N: 74114 Rev 01

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