

Basic Information

Product Name	Anti-SYN1 Antibody	
Gene Name	SYN1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Synapsin I (662-705aa KSQSLTNAFNLPEPAPPRPSLSQDEVKAETIRSLRKSFASL FSD), identical to the related mouse and rat sequences.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	78KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

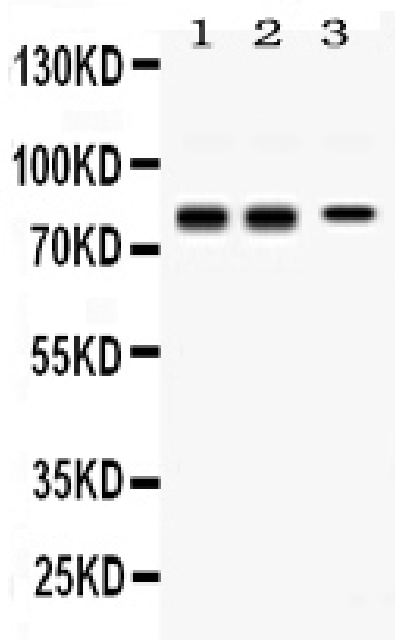
Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Synapsin I, is the collective name for Synapsin Ia and Synapsin Ib, two nearly identical phosphoproteins that in humans are encoded by the SYN1 gene. This gene is a member of the synapsin gene family. Synapsins encode neuronal phosphoproteins which associate with the cytoplasmic surface of synaptic vesicles. Family members are characterized by common protein domains, and they are implicated in synaptogenesis and the modulation of neurotransmitter release, suggesting a potential role in several neuropsychiatric diseases. This member of the synapsin family plays a role in regulation of axonogenesis and synaptogenesis. The protein encoded serves as a substrate for several different protein kinases and phosphorylation may function in the regulation of this protein in the nerve terminal. Mutations in this gene may be associated with X-linked disorders with primary neuronal degeneration such as Rett syndrome. Alternatively spliced transcript variants encoding different isoforms have been identified.

Selected Validation Data



Western blot analysis of Synapsin I expression in rat brain extract (lane 1), mouse brain extract (lane 2), and SHG-44 whole cell lysates (lane 3). Synapsin I at 78KD was detected using rabbit anti-Synapsin I Antigen Affinity purified polyclonal antibody (Catalog # PB10099) at 0.5 μ g/mL. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1002).