10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Synapsin I Picoband Antibody

Catalog # ABO11717

Specification

Anti-Synapsin I Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P17600
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Synapsin-1(SYN1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Synapsin I Picoband Antibody - Additional Information

Gene ID 6853

Other Names
Synapsin-1, Brain protein 4.1, Synapsin I, SYN1

Calculated MW
74111 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Cell junction, synapse. Golgi apparatus .

Protein Name
Synapsin-1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

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.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-Synapsin I Picoband Antibody - Protein Information

Name SYN1

Function
Neuronal phosphoprotein that coats synaptic vesicles, and binds to the cytoskeleton. Acts as a regulator of synaptic vesicles trafficking, involved in the control of neurotransmitter release at the pre-synaptic terminal (PubMed:21441247, PubMed:23406870). Also involved in the regulation of axon outgrowth and synaptogenesis (By similarity). The complex formed with NOS1 and CAPON proteins is necessary for specific nitric-oxid functions at a presynaptic level (By similarity).

Cellular Location
Synapse {ECO:0000250|UniProtKB:O88935}. Golgi apparatus {ECO:0000250|UniProtKB:O88935}. Presynapse. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle {ECO:0000250|UniProtKB:P09951}. Note=Dissociates from synaptic vesicles and redistributes into the axon during action potential firing, in a step that precedes fusion of vesicles with the plasma membrane. Reclusters to presynapses after the cessation of synaptic activity. {ECO:0000250|UniProtKB:P09951}

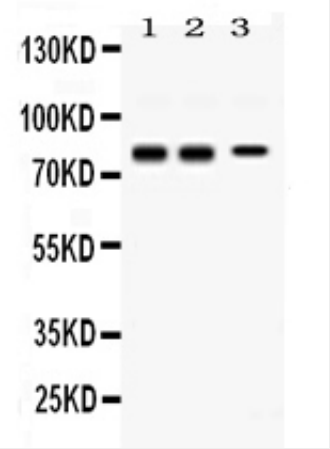
Anti-Synapsin I Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

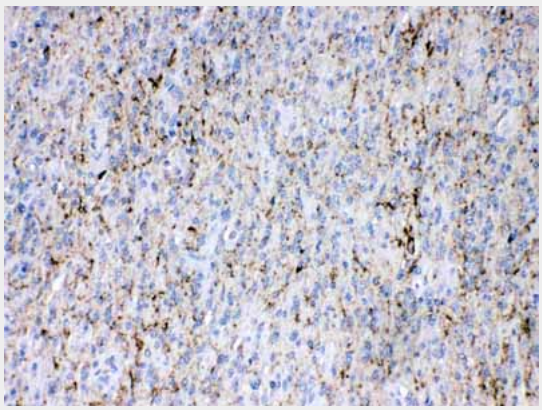
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Synapsin I Picoband Antibody - Images

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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 # ABO11717) at 0.5 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method .



Synapsin I was detected in paraffin-embedded sections of human glioma tissues using rabbit anti-Synapsin I Antigen Affinity purified polyclonal antibody (Catalog # ABO11717) at 1 ??g/mL. The immunohistochemical section was developed using SABC method .

Anti-Synapsin I Picoband Antibody - Background

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.