



Rabbit Anti-Synapsin III antibody

SL11371R

Product Name:	Synapsin III
Chinese Name:	神经突触素3抗体
Alias:	SYN 3; SYN-3; SYN3; Synapsin 3; Synapsin3; Synapsin-3; cN28H9.2 (synapsin III); OTTHUMP00000028987; SYN3_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	63kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Synapsin III:251-350/580
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Synapsins are synaptic vesicle-associated phosphoproteins that regulate synaptic vesicle exocytosis and may be involved in synaptogenesis. Evidence suggests that Synapsin I, Synapsin II and Synapsin IIIa are ATP-binding proteins that are regulated by Ca ²⁺ and calmodulin binding. Ca ²⁺ has been shown to stimulate ATP binding to Synapsin I, to have no effect on Synapsin II and to inhibit Synapsin III. Synapsin I and Synapsin II both undergo alternative splicing to produce two forms of each protein, Synapsin Ia and

Ib and Synapsin IIa and IIb, respectively. Synapsin III gives rise to at least three isoforms: Synapsin IIIa, IIIb and IIIc. Synapsin III plays unique roles both in early axon outgrowth and in the regulation of synaptic vesicle trafficking. In cultured mouse hippocampal neurons, synapsin III is expressed early during development, with levels peaking seven days after plating and declining thereafter. Synapsin III is highly concentrated in growth cones.

Function:

Synapsin III may be involved in the regulation of neurotransmitter release and synaptogenesis. It shares the synapsin family domain model, with domains A, C, and E exhibiting the highest degree of conservation. Synapsin III contains a unique domain, J, located between domains C and E. Based on the Synapsin III gene's localization to 22q12.3, a possible schizophrenia susceptibility locus, and the established neurobiological roles of the synapsins, this family member may represent a candidate gene for schizophrenia. The TIMP3 gene is located within an intron of this gene and is transcribed in the opposite direction.

Subunit:

Interacts with CAPON

Subcellular Location:

Peripheral membrane protein localized to the cytoplasmic surface of synaptic vesicles.

Tissue Specificity:

Neuron specific. Detected predominantly in brain.

Similarity:

Belongs to the synapsin family.

SWISS:

O14994

Gene ID:

8224

Database links:

[Entrez Gene: 8224](#)Human

[Entrez Gene: 29130](#)Rat

[Omim: 602705](#)Human

[SwissProt: O14994](#)Human

[SwissProt: O70441](#)Rat

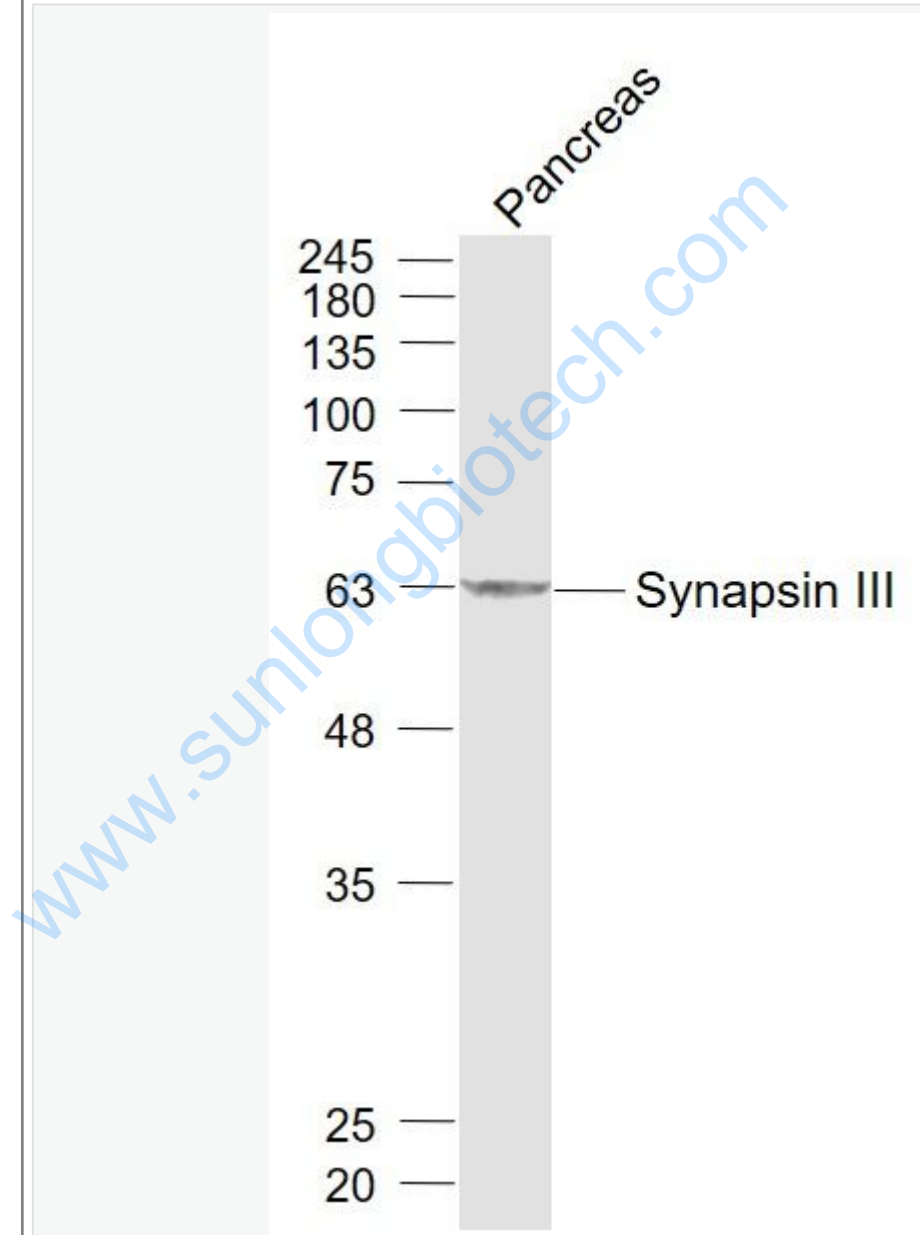
[Unigene: 608750](#)Human

[Unigene: 162920Rat](#)

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

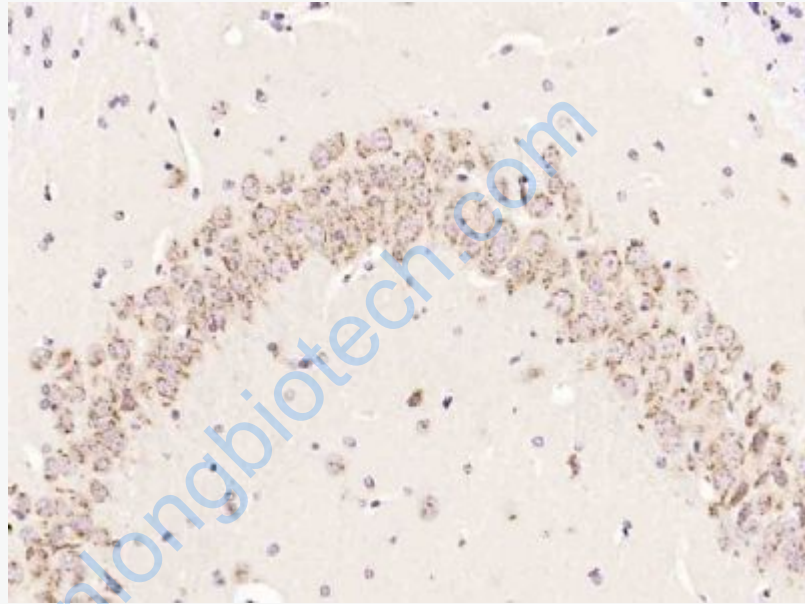
Pancreas (Mouse) Lysate at 40 ug

Primary: Anti- Synapsin III (SL11371R) at 1/1000 dilution

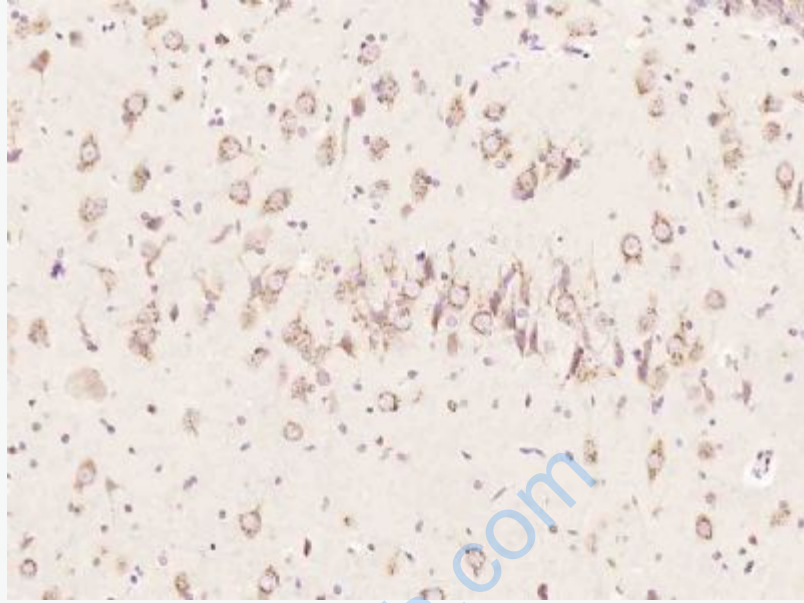
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 63 kD

Observed band size: 63 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Synapsin III) Polyclonal Antibody, Unconjugated (SL11371R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Synapsin III) Polyclonal Antibody, Unconjugated (SL11371R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.