#2312 Store at –20°C

Synapsin Antibody

☑ 100 µl
(10 western blots)

Orders ■ 877-616-CELL (2355)
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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #6853
Swiss-Prot Acc. #P17600

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	M, R, (H)	77 kDa	Rabbit**

Background: Synapsins, a group of at least five related members (synapsins Ia, Ib, IIa, IIb and IIIa), are abundant brain proteins essential for regulating neurotransmitter release (1,2). All synapsins contain a short amino-terminal domain that is highly conserved and phosphorylated by PKA or CaM kinase I (1). Phosphorylation of synapsin amino-terminal domain at serine 9 inhibits its binding to phospholipids and dissociates synapsins from synaptic vesicles (2).

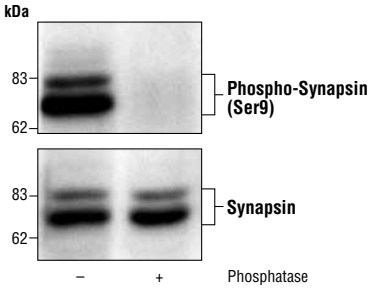
Specificity/Sensitivity: Synapsin Antibody detects endogenous levels of total synapsin protein. This antibody is expected to recognize all synapsin isoforms.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser9 of human synapsin I. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

(1) Greengard, P. (1987) *Mol. Neurobiol.* 1, 81–119.

(2) Hosaka, M. et al. (1999) *Neuron* 24, 377–387.



Western blot analysis of mouse brain homogenates, untreated or phosphatase-treated, using Phospho-Synapsin (Ser9) Antibody #2311 (upper) or Synapsin Antibody (lower).

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

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