| Store at -20C | Synapsin Antibody |                              | <b>Cell Signaling</b><br>TECHNOLOGY®         |  |
|---------------|-------------------|------------------------------|--|--|
| Store         |                   | Orders:                      | 877-616-CELL (2355)<br>orders@cellsignal.com |  |
| 12            |                   | Support:                     | 877-678-TECH (8324)                          |  |
| #2312         |                   | Web:                         | info@cellsignal.com<br>cellsignal.com        |  |
| #             |                   | 3 Trask Lane   Danvers   Mas | ssachusetts   01923   USA                    |  |

## For Research Use Only. Not for Use in Diagnostic Procedures.

| Applications: Re<br>WB  | eactivity:<br>M R       | Sensitivity:<br>Endogenous   | <b>MW (kDa):</b><br>77 in mouse<br>brain<br>homogenate.   | Source:<br>Rabbit                         | <b>UniProt ID:</b><br>#P17600   | Entrez-Gene Id<br>6853                  |  |  |
|---|-------------------------|--|---|---|---|---|--|--|
| Product Usage<br>Information                                      |                         | blication<br>stern Blotting  |   |   | Dilution<br>1:1000  |   |  |  |
| 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.  |   |   |   |   |  |  |
| Specificity / Sensitivit  | y Syna<br>reco          | Synapsin Antibody detects endogenous levels of total synapsin protein. This antibody is expected to recognize all synapsin isoforms.   |   |   |   |   |  |  |
| Species predicted to<br>react based on 100%<br>sequence homology: | Hum                     | an   |   |   |   |   |  |  |
| Source / Purification   | resid                   | 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  | prote<br>term<br>of the | 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-<br>terminal domain that is highly conserved and phosphorylated by PKA or CaM kinase I (1). Phosphorylation of the synapsin amino-terminal domain at Ser9 inhibits its binding to phospholipids and dissociates synapsins from synaptic vesicles (2). |   |   |   |   |  |  |
| Background Referenc   |                         | 1. Greengard, P. (1987) <i>Mol Neurobiol</i> 1, 81-119.<br>2. Hosaka, M. et al. (1999) <i>Neuron</i> 24, 377-87.   |   |   |   |   |  |  |
| Species Reactivity  | Speci                   | es reactivity is dete  | ermined by testing ir   | at least one appro                        | ved application (e.g., w  | estern blot).                           |  |  |
| Western Blot Buffer   |                         | IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.   |   |   |   |   |  |  |
| Applications Key  | WB:                     | Western Blotting   |   |   |   |   |  |  |
| Cross-Reactivity Key  | <b>X:</b> Xe            | <ul> <li>H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster</li> <li>X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse</li> <li>GP: Guinea Pig Rab: rabbit All: all species expected</li> </ul>   |   |   |   |   |  |  |
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