

**RABBIT ANTI-SYNAPSIN I  
AFFINITY PURIFIED  
POLYCLONAL ANTIBODY**

- CATALOG NO:** AB1543P
- LOT NUMBER:**
- QUANTITY:** 10 µg
- SPECIFICITY:** Synapsin I (M<sub>r</sub> of 80,000 and 77,000). Synapsin is located only in brain nerve terminal and is an excellent marker for synapses. Immunolabeling is blocked by preadsorption of the antibody with synapsin I.
- IMMUNOGEN:** Synapsin I (mixture of Ia & Ib) purified from bovine brain
- APPLICATIONS:** Western blotting: 1:200-1:1,000 \*See protocol on back  
Immunohistochemistry: 1:500-1:2,000 \*See protocol on back  
Immunocytochemistry: 1:500-1:2,000  
Immunoprecipitation: 1 µg will immunoprecipitate all of the synapsin I from a SDS homogenate of 200 µg of rat brain protein.  
Note: The above dilutions are with <sup>35</sup>S-protein A; with ECL dilutions may need to be considerably higher to obtain specific immunolabeling.  
Optimal working dilutions must be determined by the end user.
- SPECIES REACTIVITIES:** Human, bovine, rat and mouse.
- FORMAT:** Affinity purified immunoglobulin, no preservatives.
- PRESENTATION:** Lyophilized from 5mM ammonium bicarbonate. Reconstitute with 50 µL of PBS.
- STORAGE/HANDLING:** Maintain lyophilized material at -20°C for up to 12 months after date of receipt. After reconstitution maintain at -20°C in undiluted aliquots for up to six months. Avoid repeated freeze/thaw cycles.
- REFERENCES:** *Biol. Psychiatry.* (1993) **34**:529-535.  
*J. Neuroscience* (1994) **14**:301-309.  
*Cell Transpl.* (1995) In press.  
*J. Neuroscience* (1999) **19**:1324-1334.  
Ahmari, SE, et al., *Nature Neuroscience* (2000) **3**(5):445-451.  
Sherry, DM, et al., *J. Comparative Neurology* (2001) **431**:424-436.  
Jiang, H., et al., *Cell* (2005) **120**:123-135.

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## APPLICATION NOTES FOR AB1543P

### IMMUNOHISTOCHEMISTRY

30 mM sections of rat brain (fixed with 4% paraformaldehyde in PBS) are washed several times in PBS and blocked in a solution of 1% horse serum and 0.3% Triton X-100 for 1 hour. The tissue is then incubated overnight in AB1543P (diluted appropriately) at 4°C. Higher dilutions can be used in regions with high synaptic density (e.g.: cortex, hippocampus), lower dilutions should be used in regions with low synaptic density (e.g.: PNS, spinal cord). Sections are washed in PBS and incubated for 2 hours in preabsorbed secondary antibody.

### WESTERN BLOT

#### Transfer Buffer

20 mM Tris-HCl  
150 mM Glycine  
20 % Methanol

#### Incubation Buffer

150 mM NaCl  
50 mM Tris-HCl, pH to 7.4  
0.5% NaN<sub>3</sub> (w/v)

After pH adjustment, add Tween 20, 0.5% final concentration.

Samples of interest are run on SDS-PAGE (≈7.5%) and then transferred to nitrocellulose (other media can also be used with this antibody). The antibody will immunolabel synapsin in 10-20 µg of a rat cortex homogenate.

Incubate the Western blot for 2 hours with shaking in enough diluted AB1543P solution to cover the blot. Rinse the blot with 3 x 20 minute washes of incubation buffer. Incubate the blot in <sup>35</sup>S-protein A in incubation buffer or other secondary antibody system (e.g.: alkaline phosphatase, etc.) for 2 hours. Rinse blot with 3 x 20 minute washes of incubation buffer. Dry blot. Analyze autoradiography or by cutting the bands and determining the <sup>35</sup>S-protein A labeling.

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