

## 35-1694: Polyclonal Antibody to synaptophysin 2

<b>Clonality :</b>	Polyclonal
<b>Application :</b>	WB
<b>Reactivity :</b>	Rat,Mouse,Human
<b>Gene :</b>	Synpr
<b>Gene ID :</b>	66030
<b>Uniprot ID :</b>	P22831
<b>Format :</b>	Purified
<b>Alternative Name :</b>	Synpr
<b>Isotype :</b>	Rabbit IgG
<b>Immunogen Information :</b>	Peptide sequence around aa.257~261(G-P-T-S-F)derived from Rat synaptophysin 2.

### Description

Synaptophysin (SYP) is a neuronal synaptic vesicle glycoprotein that is expressed in neuroendocrine cells and neoplasms, and thus can be used as a marker in tumor diagnosis (1). Synaptophysin contains four transmembrane domains that form a hexameric channel or gap junction-like pore (2). Synaptophysin binds to the SNARE protein synaptobrevin/VAMP, which prevents the inclusion of synaptobrevin in the synaptic vesicle fusion complex and creates a pool of synaptobrevin for exocytosis when synapse activity increases (3). Synaptophysin is also responsible for targeting synaptobrevin 2/VAMP2 to synaptic vesicles, a critical component of the fusion complex (4). Wiedenmann, B. et al. (1986) Proc Natl Acad Sci USA 83, 3500-4. Valtorta, F. et al. (2004) Bioessays 26, 445-53. Arthur, C.P. and Stowell, M.H. (2007) Structure 15, 707-14. Bonanomi, D. et al. (2007) Biochem J 404, 525-34.

### Product Info

<b>Amount :</b>	50 $\mu$ l / 100 $\mu$ l
<b>Content :</b>	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Storage condition :</b>	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

Predicted MW: 37kd, Western blotting: 1:500~1:1000

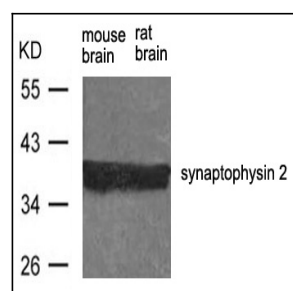


Figure 1: Western blot analysis of extract from rat brain and mouse brain using synaptophysin 2 Antibody 35-1694