ARG52426
anti-Synapsin 1 antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Synapsin 1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Synapsin 1
Species	Bovine
Immunogen	Native protein purified from bovine brain
Conjugation	Un-conjugated
Alternate Names	SYNI; Brain protein 4.1; Synapsin-1; SYN1a; SYN1b; Synapsin I

Application Instructions

Application table

Application	Dilution
ICC/IF	1:1000
IHC-P	1:1000
IP	5 µl per 200 µg lysate
WB	1:1000

Application Note

Specific for the ~78k synapsin I doublet in Western blots of Rat brain extracts. Immunolabeling blocked by preadsorption of antibody with the protein used to geneRate the antibody.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

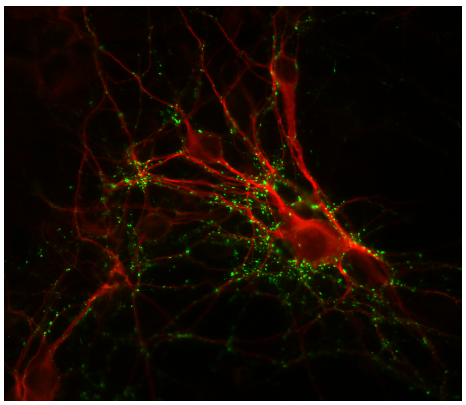
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

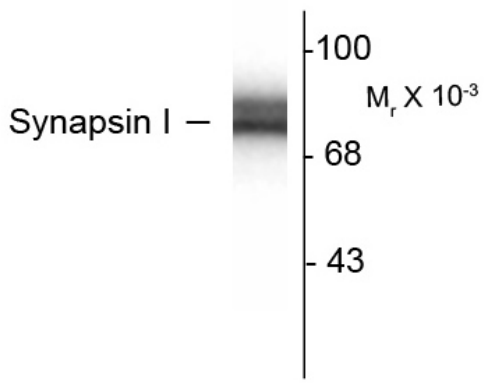
Gene Symbol	SYN1
Gene Full Name	synapsin I
Background	Synapsin I plays a key role in synaptic plasticity in brain (Feng et al., 2002; Nayak et al., 1996). This effect is due in large part to the ability of the synapsins to regulate the availability of synaptic vesicles for release. In addition to its role in plasticity, the expression of synapsin I is a precise indicator of synapse formation (Moore and Bernstein, 1989; Stone et al., 1994). Thus, synapsin I immunocytochemistry provides a valuable tool for the study of synaptogenesis. The role of synapsin in synaptic plasticity and in synaptogensis is regulated by phosphorylation (Jovanovic et al., 2001; Kao et al., 2002).
Research Area	Neuroscience antibody
Calculated Mw	74 kDa
PTM	Substrate of at least four different protein kinases. It is probable that phosphorylation plays a role in the regulation of synapsin-1 in the nerve terminal. Phosphorylation at Ser-9 dissociates synapsins from synaptic vesicles.

Images



ARG52426 anti-Synapsin 1 antibody ICC/IF image

Immunofluorescence: Cultured Mouse caudate neurons stained with ARG52426 anti-Synapsin 1 antibody (green) at 1:1000 dilution and anti-MAP antibody (red).



ARG52426 anti-Synapsin 1 antibody WB image

Western blot: 10 ug of Rat hippocampal (Hipp) lysate showing specific immunolabeling of the ~78k synapsin 1 doublet protein stained with ARG52426 anti-Synapsin 1 antibody.