Technical Data Sheet Purified Mouse Anti-Synapsin IIa

Product Information	
Material Number:	
Size.	

610666
50 μg
250 µg/ml
1/Synapsin IIa
Rat Synapsin IIa aa. 451-586
Mouse IgG1
QC Testing: Rat Tested in Development: Human 74 kDa
Aqueous buffered solution containing BSA, glycerol, and ${\leq}0.09\%$ sodium azide.

Description

Target MW: Storage Buffer:

Concentration: Clone: Immunogen: Isotype: Reactivity:

Synapsins are a group of four related proteins (synapsin Ia, Ib, IIa, and IIb) found exclusively in neuronal tissues. The four identified synapsins originate by alternative splicing of the mRNA from two different genes (synapsin I and II). Phosphorylation of synapsins occurs concomitantly with membrane excitation and neurotransmitter release into the synaptic cleft. Synapsins bind to the synaptic vesicles through their amino terminal domain, which also contains phosphorylation sites for the cAMP-dependent protein kinase. In vitro, synapsins bundle actin filaments. This indicates that synapsins may cross-link the vesicles with the actin filaments at the presynaptic terminal. By using hippocampal neurons and specific anti-sense oligonucleotides to block synapsin IIa expression, it was found that synapsin IIa was essential for the formation of synapses.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.





Western blot analysis of Synapsin IIa on a rat whole brain lysate. Lane 1: 1:5000, lane 2: 1:10,000, lane 3: 1:20,000 dilution of the mouse anti-synapsin IIa antibody. Immunohistochemical staining with the mouse anti-synapsin IIa antibody on a rat brain section (formalin-fixed paraffin-embedded section with citrate buffer pretreatment; 40x magnification).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20° C.

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Application Notes

Application				
	Western blot	Routinely Tested		
	Immunoprecipitation	Tested During Development		
	Immunohistochemistry-zinc-fixed	Tested During Development		
	Immunohistochemistry-formalin (antigen retrieval required)	Tested During Development		
	Immunofluorescence	Tested During Development		

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611463	Rat Cerebrum Lysate	500 μg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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