

Mouse Synapsin I Monoclonal Antibody | anti-Syn1 antibody

Synapsin I (C-terminal region) Antibody

CATALOG # AAA71705	HOST Mouse	REACTIVITY Human, Rat, Mouse	APPLICATIONS Immunocytochemistry, ELISA, Western Blot
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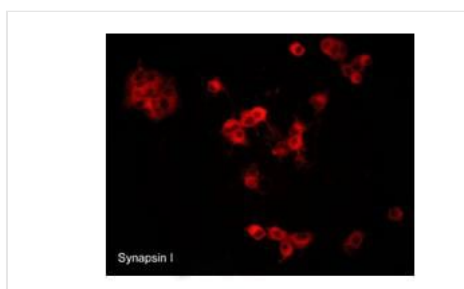
PRODUCT SYNONYMS

Synapsin I; Monoclonal Antibody; Synapsin I (C-terminal region) Antibody; Synapsin I (C-terminal region); Synapsin; anti-Syn1 antibody

PRODUCT SPECIFICATIONS

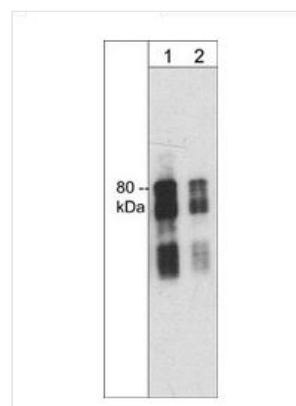
Host	Mouse
Reactivity	Human, Rat, Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Number	M365
Specificity	This antibody detects an 80kDa* protein corresponding to the molecular mass of Synapsin I on SDS-PAGE immunoblots of adult mouse brain.
Form/Format	Mouse monoclonal, protein A purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-Syn1 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Clone M365 was generated from a sequence corresponding to amino acids in the C-terminal region of mouse synapsin I. This sequence has high homology to human and rat synapsin I.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of Synapsin I in rat PC12 cells differentiated with NGF. The cells were labeled with mouse monoclonal Synapsin I (C-terminal region) antibody, then detected using appropriate secondary antibody conjugated to Cy3.



WB (Western Blot)

Western blot of mouse brain lysate. The blot was probed with mouse monoclonal anti-Synapsin I (C-terminal region) antibody at 1:250 (lane 1) or 1:1000 (lane 2).

ADDITIONAL INFORMATION

Related Product Information for anti-Syn1 antibody	Synapsins are important peripheral membrane proteins involved in synaptic vesicle release during neurotransmission between neurons. Several synapsin variants are generated by alternative splicing of the mRNA from three different genes: synapsin I, II, and III. Synapsins bind to synaptic vesicles via their conserved N-terminal domains. Regulation of synapsins may occur through PKA and CAM kinase I phosphorylation. This regulation occurs concomitantly with membrane excitation and neurotransmitter release into the synaptic cleft. Synapsins bundle actin filaments and interact with multiple calcium binding proteins. Thus, synapsins may crosslink vesicles or other proteins to actin filaments at the presynaptic terminal. In addition, synapsins may interact with each other, since synapsin III has been shown to form heteromultimers with both synapsin I and synapsin II. All synapsins contain a central ATP binding domain and variable C-terminal domains that facilitate distinct regulatory functions.
References	Hung, A.Y. et al. (2008) J. Neurosci. 28:1697. Lim, S. et al. (1999) J. Biol. Chem. 274(41):29510. Naisbitt, S. et al. (1999) Neuron 23:569.

NCBI AND UNIPROT INFORMATION

NCBI GI #	160707903
NCBI GeneID	20964
NCBI Accession #	NP_001104250.1
NCBI GenBank Nucleotide #	NM_001110780.1
UniProt Accession #	O88935; Q62279; Q8QZT8
Molecular Weight	71,483 Da
NCBI Official Full Name	synapsin-1 isoform b
NCBI Official Synonym Full Names	synapsin I
NCBI Official Symbol	Syn1
NCBI Official Synonym Symbols	Syn-1; Syn1-S
NCBI Protein Information	synapsin-1
UniProt Protein Name	Synapsin-1
UniProt Gene Name	Syn1
UniProt Synonym Gene Names	Syn-1
UniProt Entry Name	SYN1_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.