

#5297 Store at -20°C

# Synapsin-1 (D12G5) XP® Rabbit mAb



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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, W-S, IP, IHC-P, IF-F	H M R	Endogenous	77	Rabbit IgG	#P17600	6853

## Product Usage Information

### Application

Western Blotting  
Simple Western™  
Immunoprecipitation  
Immunohistochemistry (Paraffin)  
Immunofluorescence (Frozen)

### Dilution

1:1000  
1:10 - 1:50  
1:50  
1:800  
1:200

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier-free (BSA and azide free) version of this product see product #53059.

## Specificity / Sensitivity

Synapsin-1 (D12G5) XP® Rabbit mAb detects endogenous levels of total synapsin protein. The antigen is 100% conserved between human synapsin-1a and synapsin-1b.

## Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gln483 of human synapsin-1 protein.

## Background

Synapsins, a group of at least five related members (synapsins Ia, Ib, IIa, IIb, and IIIa), are abundant brain proteins essential for regulating neurotransmitter release (1,2). All synapsins contain a short amino-terminal domain that is highly conserved and phosphorylated by PKA or CaM kinase I (1). Phosphorylation of the synapsin amino-terminal domain at Ser9 inhibits its binding to phospholipids and dissociates synapsins from synaptic vesicles (2).

## Background References

1. Greengard, P. (1987) *Mol Neurobiol* 1, 81-119.
2. Hosaka, M. et al. (1999) *Neuron* 24, 377-87.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**WB:** Western Blotting **W-S:** Simple Western™ **IP:** Immunoprecipitation  
**IHC-P:** Immunohistochemistry (Paraffin) **IF-F:** Immunofluorescence (Frozen)

## Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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