

U-Blot[®] Phospho-Synapsin-1 (Ser9) Rabbit mAb (WT9102)

User Manual

General Information

Product name	U-Blot [®] Phospho-Synapsin-1 (Ser9) Rabbit mAb
Product No.	WT9102
Clonality	Recombinant monoclonal
Clone Number	W-R72
Alternative name	SYN1

Key Features

Target	Phospho-Synapsin-1 (Ser9)
Reactivity	Mouse, Rat
Applications	WB
MW(Calculated)	74 kDa
MW(Observed)	85 kDa
Host Species	Rabbit
Isotype	IgG
Conjugate	Unconjugated
Modification	Phosphorylation
Modification Site	Ser9
Purification	Protein A affinity purification
Immunogen	Polypeptide
Specificity	Specific for Synapsin-1 only when phosphorylated at Ser9

Storage Information

Storage	Store at -20°C. Avoid repeated freeze-thaw cycles
Stability	Stable for 12 months from date of receipt / reconstitution.
Formulation	PBS, Glycerol, BSA

Product Usage Information

Applications	Dilution	Recommended Species
WB	1:1000	Mouse, Rat

Target Information

Gene name	SYN1
Protein name	Synapsin-1
Organism	Human
Gene ID	6853
SwissProt	P17600

Synapsin-1 is a subfamily of synaptic proteins that consists of at least 5 related members: Synapsin Ia, Ib, IIa, IIb, and IIIa. They play a critical regulatory role in the release of neurotransmitters and are highly abundant in the nervous system. All synapsins possess a short N-terminal domain that is conserved across the members and can be phosphorylated by protein kinase A (PKA) or calcium/calmodulin-dependent kinase I (CaM kinase I). Phosphorylation of the Ser9 site within the N-terminal domain of synapsin prevents its binding to phospholipids, resulting in the separation of synapsin from synaptic vesicles. When neurons receive stimulation, phosphorylated Synapsin-1 undergoes dephosphorylation, allowing it to rebind with phospholipids and facilitate the release of synaptic vesicles. This process enables the release of neurotransmitters and the transmission of neural signals.

Background

Cellular Localization	Synapse, Golgi apparatus
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