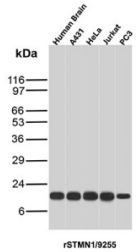
Stathmin 1 Antibody rSTMN1/9255 / STMN1 Recombinant Monoclonal Antibody [clone rSTMN1/9255] (V5504)

Catalog No.	Formulation	Size
V5504-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5504-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5504SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

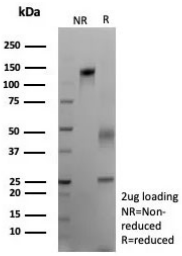
Recombinant | MOUSE MONOCLONAL

Bulk quote request

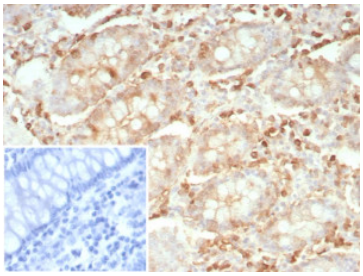
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2b, kappa
Clone Name	rSTMN1/9255
Purity	Protein A/G affinity
UniProt	P16949
Localization	Cytoplasm, Cytoskeleton
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This Stathmin 1 Antibody rSTMN1/9255 / STMN1 Recombinant Monoclonal Antibody is available for research use only.



Stathmin 1 Antibody by WB in human brain and cell lines. Western blot analysis of human brain, A431, HeLa, Jurkat, and PC-3 lysates using Stathmin 1 Antibody rSTMN1/9255. The predicted molecular weight of stathmin 1 is approximately 17 kDa.



Stathmin 1 Recombinant Monoclonal Antibody Purity by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free recombinant Stathmin 1 Antibody (rSTMN1/9255) under non-reducing (NR) and reducing (R) conditions, with 2 ug of antibody loaded per lane. The gel demonstrates antibody integrity and purity.



Stathmin 1 Antibody by IHC in human colon carcinoma. Immunohistochemistry of FFPE human colon carcinoma tissue using Stathmin 1 Antibody rSTMN1/9255. Brown immunoreactivity is predominantly cytoplasmic in tumor cells. The inset shows a negative control in which PBS replaced the primary antibody. Heat-induced epitope retrieval was performed by boiling sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 minutes.

Description

Stathmin 1 Antibody rSTMN1/9255 / STMN1 Recombinant Monoclonal Antibody recognizes stathmin 1, a cytoplasmic phosphoprotein encoded by the STMN1 gene. Also known as oncoprotein 18, OP18, and metablastin, stathmin 1 regulates microtubule dynamics by interacting with soluble tubulin and influencing microtubule assembly. Its activity contributes to cytoskeletal organization, cell division, migration, and the maintenance of cellular architecture. Stathmin belongs to a family of proteins that regulate microtubule behavior in response to intracellular signaling.

Stathmin 1 contains a tubulin-interacting domain that allows it to bind soluble alpha/beta-tubulin heterodimers. This interaction can limit the availability of tubulin for microtubule polymerization and influence microtubule stability. The protein also promotes microtubule destabilization through mechanisms associated with microtubule dynamics. These activities are regulated by phosphorylation, allowing stathmin to respond to changes in cellular signaling and cytoskeletal requirements.

Several serine residues, including Ser16, Ser25, Ser38, and Ser63, serve as regulatory phosphorylation sites. Phosphorylation generally reduces the ability of stathmin to destabilize microtubules, supporting the controlled assembly of microtubule networks during cell cycle progression. Multiple protein kinases participate in this regulation, linking stathmin activity to pathways associated with growth factor responses, mitotic entry, and cellular differentiation. The balance between phosphorylated and unphosphorylated stathmin influences its interactions with tubulin and its effects on microtubule organization.

During mitosis, microtubules reorganize into the spindle apparatus responsible for chromosome segregation. Stathmin 1 contributes to the regulation of this process and has also been implicated in cellular migration, where dynamic microtubule remodeling supports changes in cell shape and movement. Altered STMN1 expression has been reported in several cancers, including breast, lung, colorectal, and liver malignancies. Research has investigated associations between stathmin expression, proliferative activity, invasive behavior, and responses to microtubule-targeting therapies.

Stathmin 1 is therefore an important component of the signaling networks that coordinate cytoskeletal dynamics with cellular proliferation and movement. NSJ Bioreagents offers this Stathmin 1 Antibody for investigating microtubule regulation, mitotic progression, and the relationship between intracellular signaling and cytoskeletal organization.

Explore our STMN1 Antibody R31986 for additional research tools targeting stathmin 1, with validation data spanning Western blot, immunohistochemistry, immunofluorescence, and flow cytometry.

Application Notes

Optimal dilution of the Stathmin 1 Antibody rSTMN1/9255 / STMN1 Recombinant Monoclonal Antibody should be determined by the researcher.

Immunogen

A recombinant fragment (within amino acids 1-148) of human STMN1 protein was used as the immunogen for the Stathmin 1 Antibody rSTMN1/9255.

Storage

Aliquot the Stathmin 1 Antibody rSTMN1/9255 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

STMN1 antibody, Oncoprotein 18 antibody, OP18 antibody, Metablastin antibody, Leukemia-associated phosphoprotein p18 antibody

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