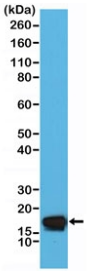
STMN1 Antibody RM350 / Stathmin Rabbit MAb [clone RM350] (R20372)

Catalog No.	Formulation	Size
R20372-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ul

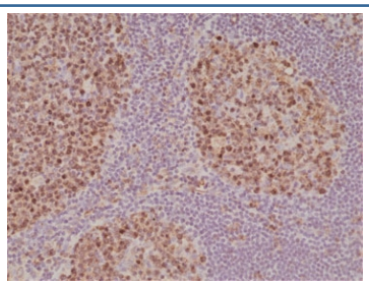
Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM350
Purity	Protein A purified from animal origin-free supernatant
UniProt	P16949
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1:500-1:1000 Western blot: 1:2000-1:5000
Limitations	This STMN1 Antibody RM350 is available for research use only.



Western blot testing of human HeLa cell lysate with STMN1 Antibody RM350 at 1:5000 dilution. Expected molecular weight ~17 kDa.



IHC staining of FFPE human tonsil tissue with recombinant STMN1 antibody at 1:1000.

Description

STMN1 Antibody RM350 / Stathmin Rabbit MAb recognizes stathmin 1, a cytoplasmic phosphoprotein encoded by the STMN1 gene. Also known as oncoprotein 18, OP18, prosolin, and metablastin, stathmin 1 regulates microtubule dynamics by interacting with soluble tubulin and influencing microtubule assembly. This protein contributes to cytoskeletal organization, cell division, migration, and differentiation. Its activity is particularly important during processes requiring rapid changes in microtubule stability and cellular architecture.

Stathmin 1 regulates microtubule behavior through two complementary mechanisms: sequestration of soluble alpha/beta-tubulin heterodimers and promotion of microtubule destabilization. By influencing the balance between free tubulin and polymerized microtubules, stathmin helps control cytoskeletal organization. These activities are especially important during mitosis, when microtubules undergo extensive remodeling to form the mitotic spindle responsible for chromosome segregation.

The activity of stathmin 1 is regulated by phosphorylation at four major serine residues: Ser16, Ser25, Ser38, and Ser63. Phosphorylation generally reduces its ability to bind tubulin and destabilize microtubules, allowing intracellular signaling pathways to regulate cytoskeletal organization. Several protein kinases participate in this process, connecting stathmin function to growth factor signaling, cell cycle progression, and cellular responses to environmental stimuli. Changes in phosphorylation state help coordinate microtubule dynamics with the requirements of different cellular processes.

Stathmin 1 is frequently expressed in proliferating cells and has been extensively investigated in cancer biology. Elevated STMN1 expression has been reported in breast, lung, colorectal, liver, and other malignancies. Research has examined associations between stathmin abundance, tumor cell proliferation, invasive behavior, and sensitivity to microtubule-targeting therapies. However, these relationships vary among tumor types and experimental conditions, and elevated expression alone does not establish a particular clinical outcome.

Beyond its involvement in cancer, stathmin 1 contributes to neuronal development, cell migration, and other processes requiring coordinated cytoskeletal remodeling. Its phosphorylation-dependent regulation provides an important connection between intracellular signaling and microtubule organization. NSJ Bioreagents offers this STMN1 Antibody for research examining mitotic regulation, cytoskeletal dynamics, cellular proliferation, and the molecular mechanisms governing cell movement.

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

The stated application concentrations are suggested starting points. Titration of the STMN1 Antibody RM350 may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A peptide corresponding to the C-terminus of human Stathmin was used as the immunogen for the recombinant STMN1 antibody.

Storage

Store the recombinant STMN1 antibody at -20oC.

Alternate Names

Stathmin 1 antibody, Stathmin antibody, OP18 antibody, Metablastin antibody, Prosolin antibody, Leukemia-associated phosphoprotein p18 antibody

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