

SYVN1 Antibody / Synoviolin [clone 32S38] (FY13144)

Catalog No.	Formulation	Size
FY13144	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

[Bulk quote request](#)

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	32S38
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q86TM6
Applications	Western Blot : 1:500-1:2000 Immunocytochemistry/Immunofluorescence : 1:50-1:200 Immunoprecipitation : 1:50 Flow Cytometry : 1:50
Limitations	This SYVN1 antibody is available for research use only.

Description

SYVN1 antibody detects Synoviolin, encoded by the SYVN1 gene. Synoviolin is an endoplasmic reticulum (ER) resident E3 ubiquitin ligase that plays a central role in ER-associated degradation (ERAD), the process that disposes of misfolded proteins from the ER. By tagging substrates with ubiquitin, Synoviolin directs them for proteasomal degradation, thereby maintaining protein homeostasis in the secretory pathway. SYVN1 antibody provides researchers with a critical reagent to study protein quality control, ER stress, and disease.

ER-associated degradation is essential for secretory pathway fidelity. Research using SYVN1 antibody has shown that Synoviolin forms part of the ER membrane-anchored ubiquitin ligase complex, recognizing unfolded substrates and ubiquitinating them for retrotranslocation and proteasomal degradation. This prevents accumulation of misfolded proteins, protecting cells from ER stress and apoptosis. By maintaining proteostasis, SYVN1 safeguards secretory and metabolic

tissues.

Aberrant expression of Synoviolin has been linked to cancer, fibrosis, and autoimmune disease. Studies with SYVN1 antibody have revealed that overexpression promotes tumor survival by reducing ER stress-induced apoptosis. In rheumatoid arthritis, Synoviolin overexpression in synovial tissue contributes to pathological proliferation and joint destruction. These findings highlight SYVN1 as both a biomarker and a potential therapeutic target.

Beyond pathology, SYVN1 contributes to normal development and physiology. Research using SYVN1 antibody has shown that knockout mice exhibit embryonic lethality due to defective ERAD, confirming its essential function. In the liver, SYVN1 regulates lipid metabolism and detoxification processes by controlling ER protein load. These functions underscore the importance of Synoviolin in both health and disease.

SYVN1 antibody is widely used in western blotting, immunohistochemistry, and immunoprecipitation. Western blotting confirms expression in liver and synovium, immunohistochemistry highlights tissue-specific overexpression in disease, and immunoprecipitation identifies substrates ubiquitinated by Synoviolin. These methods make SYVN1 antibody a versatile tool in cell biology and translational research.

By supplying validated SYVN1 antibody reagents, NSJ Bioreagents supports research into ER quality control, cancer, and immune regulation. Detection of Synoviolin enables researchers to explore how ERAD maintains proteostasis and how its disruption contributes to pathology.

Application Notes

Optimal dilution of the SYVN1 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human SYVN1 / HRD1 was used as the immunogen for the SYVN1 antibody.

Storage

Store the SYVN1 antibody at -20oC.