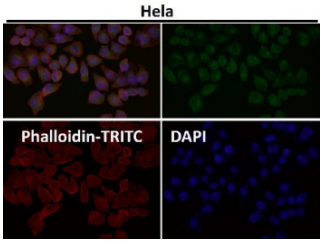
SEC14L2 Antibody / SEC14-like protein 2 [clone 31S32] (FY13173)

Catalog No.	Formulation	Size
FY13173	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

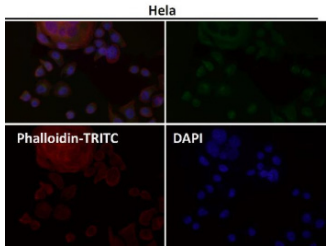
Recombinant RABBIT MONOCLONAL

Bulk quote request

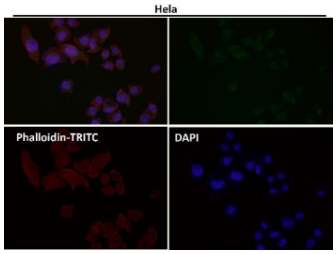
Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31S32
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	O76054
Applications	Immunofluorescence : 1:50-1:200 Immunohistochemistry : 1:50-1:200 Immunocytochemistry/Western Blot : 1:500-1:2000
Limitations	This SEC14L2 antibody is available for research use only.



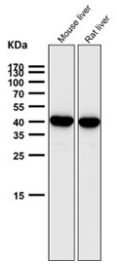
Immunofluorescent analysis using the SEC14L2 antibody (green) at 1:50 dilution.



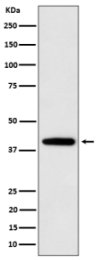
Immunofluorescent analysis using the SEC14L2 antibody (green) at 1:150 dilution.



Immunofluorescent analysis using the SEC14L2 antibody (green) at 1:500 dilution.



Western blot testing of mouse and rat samples using the SEC14L2 antibody at 1:5000 dilution for 1 hour at room temperature. SEC14L2 antibody detects a single band at ~40-43 kDa in mouse and rat liver. Although the predicted size is ~46 kDa, SEC14L2 typically migrates slightly faster on SDS-PAGE due to sequence composition and minor terminal processing.



Western blot analysis of SEC14L2 expression in human U87-MG cell lysate using SEC14L2 antibody. SEC14L2 antibody detects a single band at ~40-43 kDa. Although the predicted size is ~46 kDa, SEC14L2 typically migrates slightly faster on SDS-PAGE due to sequence composition and minor terminal processing.

Description

SEC14L2 antibody detects SEC14 like protein 2, encoded by the SEC14L2 gene. SEC14 like protein 2 is a member of the SEC14 family of lipid binding proteins that regulate lipid metabolism, transport, and signaling. Originally identified by its homology to the yeast SEC14 phosphatidylinositol transfer protein, SEC14 like protein 2 binds lipids and may modulate phosphoinositide signaling in mammalian cells. SEC14L2 antibody provides researchers with a useful tool to study lipid biology, hepatocyte function, and metabolic regulation.

SEC14 like protein 2 is primarily expressed in the liver, where it localizes to cytoplasmic and membrane compartments. Research using SEC14L2 antibody has demonstrated that it interacts with phosphatidylinositol and other lipids, potentially regulating availability of signaling molecules. In hepatocytes, SEC14 like protein 2 may act as a cofactor for lipid modifying enzymes, integrating lipid metabolism with cell signaling and homeostasis. Its conservation across species highlights an essential role in cellular lipid handling.

One of the most intriguing functions of SEC14 like protein 2 is its ability to support hepatitis C virus replication. Studies with SEC14L2 antibody have shown that expression of this protein allows hepatitis C virus to replicate efficiently in cell culture models that are otherwise nonpermissive. This has made SEC14 like protein 2 a focus of viral research, as its presence facilitates the assembly of viral replication complexes. Its role in host-virus interactions positions it as a potential

antiviral target.

Beyond virology, SEC14 like protein 2 is associated with cancer biology and metabolic disease. Research using SEC14L2 antibody has suggested that altered expression influences lipid signaling pathways, contributing to tumorigenesis or metabolic dysfunction. Because lipid metabolism is tightly linked to growth control and energy balance, SEC14 like protein 2 may serve as a metabolic regulator in both health and disease.

SEC14L2 antibody is applied in western blotting, immunohistochemistry, and immunofluorescence. Western blotting confirms expression in liver tissues and cell lines, immunohistochemistry demonstrates tissue distribution, and immunofluorescence reveals cytoplasmic and membrane localization. These applications make SEC14L2 antibody versatile for metabolic and viral research.

By supplying validated SEC14L2 antibody reagents, NSJ Bioreagents supports research into lipid metabolism, viral replication, and hepatocyte biology. Detection of SEC14 like protein 2 provides insight into how lipid binding proteins regulate signaling and disease processes.

Application Notes

Optimal dilution of the SEC14L2 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human SEC14L2 / TAP was used as the immunogen for the SEC14L2 antibody.

Storage

Store the SEC14L2 antibody at -20oC.