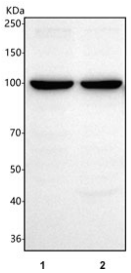
SLFN13 Antibody / Schlafen 13 Antibody (RQ8672)

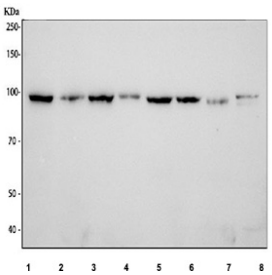
Catalog No.	Formulation	Size
RQ8672	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q68D06
Applications	Western blot: 0.5-1ug/ml ELISA: 0.1-0.5ug/ml
Limitations	This SLFN13 Antibody / Schlafen 13 Antibody is available for research use only.



SLFN13 Antibody Human HEL and RT4 Cell WB. Western blot testing of human HEL and RT4 cell lysates (lanes 1-2) was performed with SLFN13 Antibody. Strong specific bands are detected at approximately 100-102 kDa, consistent with the predicted molecular weight of approximately 102 kDa for SLFN13. This SLFN13 Antibody demonstrates detection of Schlafen 13 in human HEL and RT4 cells.



SLFN13 Antibody Human, Mouse and Rat Cell WB. Western blot testing was performed with SLFN13 Antibody on human HEL, RT-4, THP-1 and HaCaT cell lysates (lanes 1-4), rat C6, PC-12 and C2C12 cell lysates (lanes 5-7), and mouse RAW264.7 cell lysate (lane 8). Specific bands are detected at approximately 95-100 kDa, close to the predicted molecular weight of approximately 102 kDa for SLFN13. This SLFN13 Antibody demonstrates detection of Schlafen 13 across human, mouse and rat cell lysates.

Description

SLFN13 Antibody / Schlafen 13 Antibody detects SLFN13, a member of the Schlafen family of proteins involved in cellular processes associated with RNA metabolism, protein synthesis and growth regulation. SLFN13, officially named Schlafen family member 13, belongs to a group of proteins characterized by a conserved Schlafen core domain. Members of this family have been investigated in immune regulation, cellular differentiation, proliferation and responses to physiological stress, although individual Schlafen proteins can have distinct molecular activities and expression patterns.

SLFN13 has attracted particular interest because of its ability to regulate RNA. The protein possesses ribonuclease activity and has been reported to cleave transfer RNAs and ribosomal RNAs, providing a mechanism through which it can influence cellular protein synthesis. RNA cleavage can disrupt the availability or function of components required for translation, linking Schlafen 13 activity to regulation of the cellular translational machinery. These properties distinguish SLFN13 as an important target for investigating relationships between RNA metabolism and control of protein production.

Transfer RNAs are essential adaptors that deliver amino acids to translating ribosomes, while ribosomal RNAs form structural and catalytic components of the ribosome itself. By acting on these RNA populations, SLFN13 can affect the ability of cells to maintain efficient translation. Regulation of protein synthesis is particularly important during changes in cellular growth, differentiation and stress, when cells may need to rapidly alter the abundance and types of proteins being produced. A SLFN13 Antibody can support investigation of Schlafen 13 expression in experimental systems examining these processes.

The broader Schlafen family includes proteins with roles in immune cell biology, antiviral responses, differentiation and growth control. Some family members act through mechanisms involving nucleic acid metabolism, while others participate in cellular regulatory pathways that remain under investigation. The functional diversity within the family makes it important to distinguish findings established specifically for SLFN13 from biological activities associated with other Schlafen proteins. Studies of SLFN13 can help clarify how its RNA-directed activity contributes to the broader cellular functions associated with the Schlafen family.

SLFN13 is also relevant to research examining cellular stress and mechanisms that suppress protein synthesis. Changes in RNA integrity and translational capacity can substantially influence cell growth and survival, particularly under conditions that alter metabolic demands or activate stress-response pathways. Investigating SLFN13 expression alongside components of the translational machinery may therefore provide insight into how RNA cleavage and protein synthesis are coordinated during changes in cellular state.

NSJ Bioreagents offers SLFN13 Antibody reagents for investigating the expression and biological roles of this Schlafen family protein. A Schlafen 13 Antibody can support research into RNA metabolism, ribosome biology, translational regulation, cellular stress responses and mechanisms connecting Schlafen proteins with control of protein synthesis.

Researchers studying SLFN13 in RNA regulation, translational control and cellular stress responses can explore our Signal Transduction Antibodies page for additional targets involved in the regulation of cellular growth and stress signaling.

Application Notes

Optimal dilution of the SLFN13 Antibody / Schlafen 13 Antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (amino acids Q62-R797) was used as the immunogen for the SLFN13 antibody.

Storage

After reconstitution, the SLFN13 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at

-20oC. Avoid repeated freezing and thawing.

Alternate Names

SLFN13 antibody, Schlafen 13 antibody, Schlafen Family Member 13 antibody, Schlafen-13 antibody

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