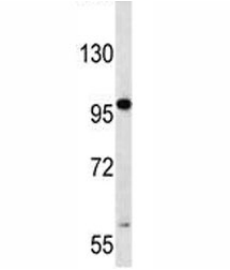
RNF43 Antibody / Ring finger protein 43 (F42806)

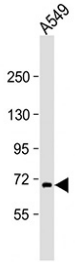
Catalog No.	Formulation	Size
F42806-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F42806-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q68DV7
Localization	Nuclear
Applications	Western Blot : 1:1000-1:2000
Limitations	This RNF43 antibody is available for research use only.



Western blot analysis of human CEM cell lysate using RNF43 antibody. A specific band is detected at approximately 90-95 kDa, consistent with endogenous RNF43. The observed molecular weight is consistent with post-translationally modified forms of RNF43 in lymphoid cells.



Western blot analysis of human A549 cell lysate using RNF43 antibody. A specific band is detected at approximately 70-75 kDa, consistent with endogenous RNF43. Differences in apparent molecular weight relative to other cell types likely reflect cell-dependent post-translational modification of RNF43.

Description

RNF43 antibody targets Ring finger protein 43 (RNF43), a single-pass transmembrane E3 ubiquitin ligase that modulates cell surface receptor availability and signaling intensity. RNF43 is best known for its role in regulating Wnt pathway activity by ubiquitinating Frizzled receptors, thereby promoting their internalization and turnover. The protein localizes to the plasma membrane and endosomal compartments, positioning RNF43 to directly influence receptor trafficking and signal attenuation. As a RING-type E3 ligase, RNF43 contributes to ubiquitin-dependent control of membrane protein homeostasis.

Functionally, RNF43 acts as a feedback regulator that restrains excessive Wnt signaling. Induction of RNF43 expression following pathway activation limits receptor abundance at the cell surface, preventing sustained or inappropriate signal propagation. This mechanism is critical in tissues with high regenerative capacity, where precise control of Wnt signaling governs cell proliferation, differentiation, and tissue architecture. An RNF43 antibody supports studies focused on receptor regulation and signal termination mechanisms.

RNF43 exhibits cell-type-dependent expression and post-translational modification, which can influence its apparent molecular weight and intracellular distribution. These properties reflect its dynamic trafficking through the secretory and endosomal systems and its engagement with ubiquitination machinery. Analysis of RNF43 expression provides insight into how cells fine-tune signaling outputs through regulated receptor turnover rather than changes in ligand availability alone.

From a biological and disease-relevance perspective, RNF43 has been widely studied in epithelial biology and cancer research. Loss-of-function alterations in RNF43 are associated with enhanced Wnt responsiveness and dysregulated cell growth, particularly in gastrointestinal tissues. Because RNF43 acts as a negative regulator of a major developmental signaling pathway, it is frequently examined in studies of tumor suppressive mechanisms and pathway-driven disease models.

At the molecular level, RNF43 is encoded by the RNF43 gene and produces a transmembrane protein with a cytosolic RING finger domain responsible for E3 ubiquitin ligase activity. Regulation of RNF43 function depends on cellular context, receptor interactions, and ubiquitination dynamics. An RNF43 antibody supports research applications focused on membrane protein regulation, ubiquitin signaling, and pathway control, with NSJ Bioreagents providing reagents intended for research use.

For a broader overview of RNF43 function, Frizzled receptor regulation and Wnt signaling, visit our main RNF43 Antibody / Wnt Signaling Regulator Antibody page.

Application Notes

Titration of the RNF43 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 543-572 from the human protein was used as the immunogen for this RNF43 antibody.

Storage

Aliquot the RNF43 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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