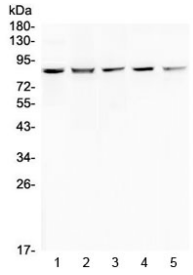
RNF43 Antibody / Wnt Signaling Regulator Antibody (RQ4411)

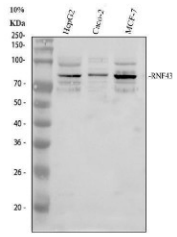
Catalog No.	Formulation	Size
RQ4411	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q68DV7
Localization	Nuclear
Applications	Western blot: 0.5-1ug/ml Direct ELISA: 0.1-0.5ug/ml (recombinant human protein) (BSA-free format available)
Limitations	This RNF43 Antibody / Wnt Signaling Regulator Antibody is available for research use only.



RNF43 Antibody Multi-Human Cancer Cell WB. Western blot analysis using RNF43 Antibody. Lane 1: human HeLa cells; Lane 2: human 293T cells; Lane 3: human COLO-320 cells; Lane 4: human SW620 cells; Lane 5: human MCF7 cells. A specific band is detected at approximately 86 kDa, consistent with RNF43 isoform 1. Higher molecular weight isoforms, including the approximately 95 kDa isoform 4, may also be observed depending on expression levels and post-translational modification. The broad detection across multiple human cancer cell lines supports the use of RNF43 Antibody / Wnt Signaling Regulator Antibody for studying RNF43 expression, Wnt signaling regulation and receptor ubiquitination.



RNF43 Antibody Human Liver and Colon Cancer Cell WB. Western blot analysis using RNF43 Antibody. Lane 1: human HepG2 cells; Lane 2: human Caco-2 cells; Lane 3: human MCF-7 cells. A prominent band is detected at approximately 86 kDa in each lysate, matching the expected molecular weight of RNF43. Detection in hepatocellular carcinoma, colorectal adenocarcinoma and breast adenocarcinoma cell lines demonstrates RNF43 expression across diverse epithelial cancer models commonly used to investigate Wnt signaling and receptor regulation. These results support the use of RNF43 Antibody / Wnt Signaling Regulator Antibody for studying RNF43 expression, Frizzled receptor ubiquitination and Wnt pathway regulation.

Description

RNF43 Antibody / Wnt Signaling Regulator Antibody detects RNF43, a transmembrane RING finger E3 ubiquitin ligase that functions as a key negative regulator of the Wnt signaling pathway. RNF43 limits Wnt pathway activation by ubiquitinating Frizzled receptors, promoting their internalization and degradation from the cell surface. Through this mechanism, RNF43 controls cellular responses to Wnt ligands and helps maintain tissue homeostasis, epithelial integrity and regulated cell proliferation. RNF43 Antibody / Wnt Signaling Regulator Antibody is widely used to investigate Wnt signaling, stem cell biology and cancer progression.

RNF43 is expressed in a variety of epithelial tissues and plays an essential role in balancing self-renewal and differentiation. By restricting the abundance of Frizzled receptors at the plasma membrane, RNF43 prevents excessive activation of beta-catenin-dependent signaling and contributes to normal regulation of intestinal crypts, gastric epithelium and other rapidly renewing tissues. RNF43 activity is functionally opposed by R-spondin proteins, which promote removal of RNF43 from the cell surface through LGR receptors, thereby enhancing Wnt signaling. This dynamic regulatory system is critical for maintaining stem cell populations and controlling tissue regeneration. Consequently, RNF43 Antibody / Wnt Signaling Regulator Antibody provides an important tool for studying receptor turnover, stem cell regulation and Wnt pathway activity.

RNF43 has emerged as one of the most frequently altered genes in Wnt pathway-driven cancers. Inactivating mutations have been identified in colorectal, pancreatic, gastric, endometrial and ovarian tumors, leading to increased Frizzled receptor abundance and persistent activation of Wnt signaling. Because tumors harboring RNF43 mutations may exhibit increased dependence on Wnt ligands, RNF43 has become an important biomarker for precision oncology and the development of Wnt pathway inhibitors. Analysis of RNF43 expression is therefore valuable for investigations into tumor initiation, progression and therapeutic response.

In addition to regulating epithelial homeostasis, RNF43 contributes to developmental biology, organ regeneration and cellular differentiation through its effects on receptor ubiquitination and membrane protein turnover. As interest in targeted modulation of Wnt signaling continues to grow, RNF43 remains an important molecule for understanding how ubiquitination regulates receptor availability and downstream signaling networks. Ongoing research continues to define additional RNF43-interacting proteins and mechanisms that influence tissue maintenance and disease progression.

NSJ Bioreagents offers RNF43 Antibody / Wnt Signaling Regulator Antibody products for researchers studying Wnt signaling, ubiquitination, stem cell biology and cancer. These antibodies support applications including Western blot, immunohistochemistry, immunofluorescence, immunoprecipitation and flow cytometry for analysis of RNF43 expression and localization. RNF43 Antibody / Wnt Signaling Regulator Antibody provides a valuable tool for investigating receptor ubiquitination, Frizzled receptor regulation, epithelial homeostasis and Wnt pathway-associated diseases.

Researchers studying Wnt pathway regulation and tumor biology may also be interested in our Cancer Antibodies page, featuring antibodies against signaling proteins, ubiquitin ligases and other biomarkers involved in cancer progression, stem cell regulation and therapeutic research.

Application Notes

Optimal dilution of the RNF43 Antibody / Wnt Signaling Regulator Antibody should be determined by the researcher.

Immunogen

A human partial recombinant protein corresponding to amino acids G24-Y197 was used as the immunogen for the RNF43 antibody.

Storage

After reconstitution, the RNF43 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

Ring Finger Protein 43 antibody, E3 Ubiquitin Protein Ligase RNF43 antibody, RING-Type E3 Ubiquitin Ligase RNF43 antibody, RNF124 antibody, Ring Finger Protein 124 antibody, PAWS1-Associated Ring Finger Protein antibody

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