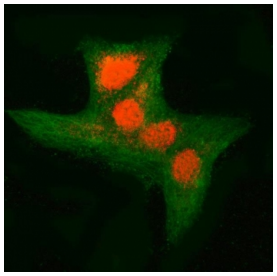
RNF34 Antibody / hRFI / CARP-1 (RQ7835)

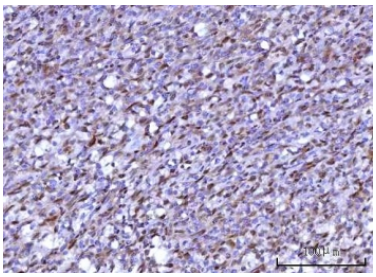
Catalog No.	Formulation	Size
RQ7835	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

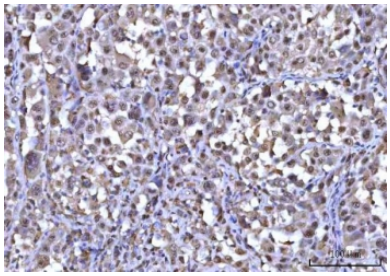
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q969K3
Localization	Cytoplasmic, nuclear, cell membrane
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This RNF34 antibody is available for research use only.



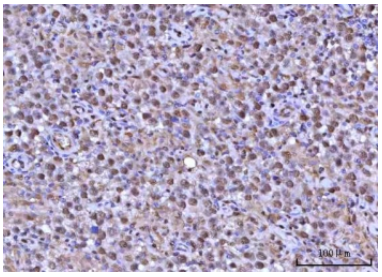
Immunofluorescence analysis of RNF34 and Tubulin beta in human A549 cells. RNF34 antibody (red) staining shows predominant nuclear localization with punctate signal distributed within the nucleus, accompanied by weaker punctate staining in the cytoplasm. Tubulin beta antibody (green) highlights the cytoplasmic microtubule network, providing contrast to the nuclear RNF34 signal. Cells were fixed and blocked prior to incubation with rabbit anti-RNF34 antibody and mouse anti-Tubulin beta antibody, followed by Cy3-conjugated goat anti-rabbit IgG (red) and DyLight 488-conjugated goat anti-mouse IgG (green). Images were acquired using a fluorescence microscope with appropriate filter sets.



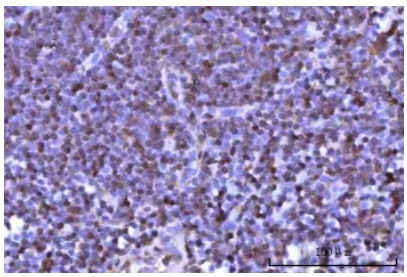
IHC staining of FFPE human diffuse large B cell lymphoma tissue with RNF34 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



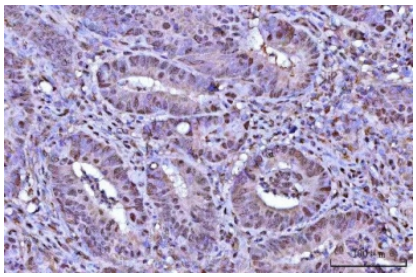
IHC staining of FFPE human lung adenocarcinoma tissue with RNF34 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



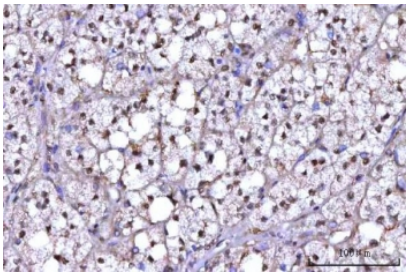
IHC staining of FFPE human testicular seminoma tissue with RNF34 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



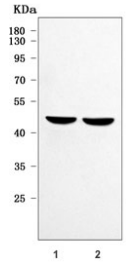
IHC staining of FFPE human tonsil tissue with RNF34 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



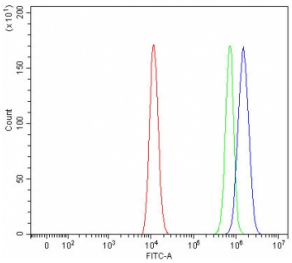
IHC staining of FFPE human rectum adenocarcinoma tissue with RNF34 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



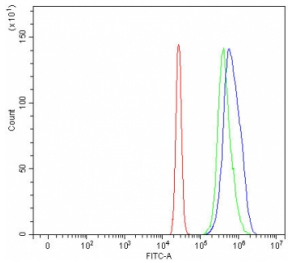
IHC staining of FFPE human adrenocortical adenoma tissue with RNF34 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) 293T and 2) HeLa cell lysate with RNF34 antibody. Predicted molecular weight ~42 kDa.



Flow cytometry testing of human HEL cells with RNF34 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= RNF34 antibody.



Flow cytometry testing of human HL-60 cells with RNF34 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= RNF34 antibody.

Description

RNF34/hRFI antibody recognizes ring finger protein 34, an E3 ubiquitin ligase originally described as human ring finger protein interacting with IKKgamma. RNF34 is a cytoplasmic protein characterized by a C3HC4-type RING finger domain that mediates ubiquitin ligase activity, enabling the transfer of ubiquitin to specific substrate proteins. Through this function, RNF34 contributes to regulation of protein stability and signaling pathways controlled by the ubiquitin proteasome system.

RNF34 has been implicated in modulation of immune and inflammatory signaling pathways, particularly those linked to nuclear factor kappa B activity. Early studies identified hRFI as a regulator interacting with components of the IKK complex, suggesting a role in fine tuning signaling outputs through ubiquitin dependent mechanisms. The protein localizes predominantly to the cytoplasm, where it can associate with signaling intermediates and target proteins for ubiquitination and downstream degradation or functional modulation.

Expression of RNF34 has been reported across multiple tissues, with notable relevance in immune related cell types. As an E3 ligase, RNF34 participates in selective substrate recognition, distinguishing it from the more general activity of E1 and E2 enzymes. This specificity allows RNF34 to influence discrete signaling cascades and cellular responses, particularly those involved in stress responses, immune regulation, and cell survival pathways. Use of an RNF34 antibody therefore supports investigation of ubiquitin mediated control mechanisms in diverse biological contexts.

Beyond immune signaling, RNF34 has also been explored in relation to apoptosis and cellular homeostasis. By regulating the stability of proteins involved in cell fate decisions, hRFI may contribute to the balance between survival and programmed cell death under physiological and pathological conditions. Altered expression or activity of RNF34 has been examined in cancer related studies, where dysregulation of ubiquitin ligase activity is a common feature influencing tumor progression and resistance mechanisms.

RNF34 Antibody / hRFI is designed to detect RNF34 in research applications. Detection of RNF34 enables assessment of

its expression patterns and subcellular distribution in cell and tissue based studies. Given the central role of ubiquitin ligases in controlling signaling networks, RNF34 remains a protein of interest for studies focused on immune regulation, intracellular signaling, and disease associated alterations in ubiquitin dependent pathways.

Application Notes

Optimal dilution of the RNF34 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids E46-S372) was used as the immunogen for the RNF34 antibody.

Storage

After reconstitution, the RNF34 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Copyright © NSJ Bioreagents. All rights reserved.