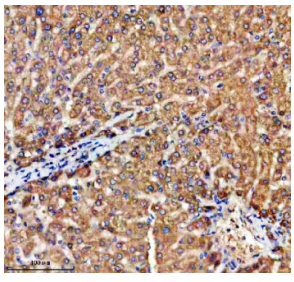
TRIM59 Antibody / Tripartite motif-containing protein 59 (FY12455)

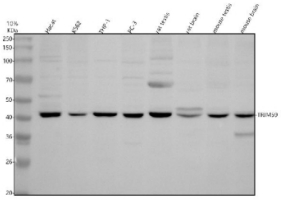
Catalog No.	Formulation	Size
FY12455	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

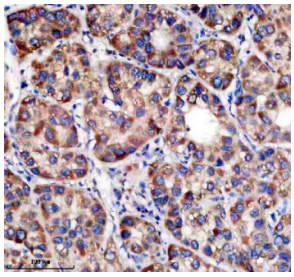
Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q8IWR1
Localization	ER
Applications	Western Blot: 0.25-0.5ug/ml Immunohistochemistry: 2-5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This TRIM59 antibody is available for research use only.



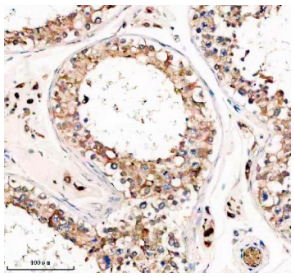
Immunohistochemical staining of TRIM59 using anti-TRIM59 antibody. TRIM59 was detected in a paraffin-embedded section of human liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-TRIM59 antibody overnight at 4oC. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37oC. The tissue section was developed using an HRP secondary and DAB substrate.



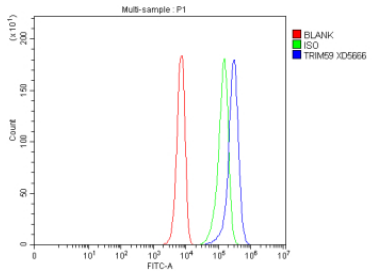
Western blot analysis of TRIM59 using anti-TRIM59 antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human Hacat whole cell lysates, Lane 2: human K562 whole cell lysates, Lane 3: human THP-1 whole cell lysates, Lane 4: human PC-3 whole cell lysates, Lane 5: rat testis tissue lysates, Lane 6: rat brain tissue lysates, Lane 7: mouse testis tissue lysates, Lane 8: mouse brain tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TRIM59 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. TRIM59 (~53 kDa predicted) was detected at 42-48 kDa, consistent with the known lower electrophoretic mobility of TRIM family proteins and previously reported truncated or compact isoforms.



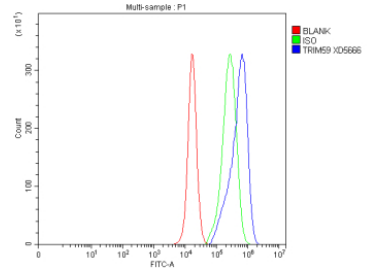
Immunohistochemical staining of TRIM59 using anti-TRIM59 antibody. TRIM59 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-TRIM59 antibody overnight at 4oC. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37oC. The tissue section was developed using an HRP secondary and DAB substrate.



Immunohistochemical staining of TRIM59 using anti-TRIM59 antibody. TRIM59 was detected in a paraffin-embedded section of human testis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-TRIM59 antibody overnight at 4oC. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37oC. The tissue section was developed using an HRP secondary and DAB substrate.



Flow Cytometry analysis of K562 cells using anti-TRIM59 antibody. Overlay histogram showing K562 cells stained with (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TRIM59 antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Flow Cytometry analysis of PC-3 cells using anti-TRIM59 antibody. Overlay histogram showing PC-3 cells stained with (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TRIM59 antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Description

TRIM59 antibody recognizes Tripartite motif-containing protein 59, an E3 ubiquitin ligase that regulates diverse cellular processes including innate immunity, oncogenic signaling, and protein stability. TRIM59 belongs to the TRIM family characterized by a RING finger domain, one or two B-box domains, and a coiled-coil region responsible for self-association and substrate recognition. As a member of this family, TRIM59 modulates ubiquitination and degradation of target proteins, influencing signal transduction, apoptosis, and transcriptional regulation. The TRIM59 antibody is widely used to investigate tumorigenesis, immune signaling, and ubiquitin-proteasome pathway regulation.

TRIM59 is encoded by the TRIM59 gene on human chromosome 3q25.33. The protein localizes mainly to the cytoplasm but can translocate to the nucleus under specific signaling conditions. It interacts with multiple oncogenic and tumor-suppressive pathways, including p53, STAT3, and Ras-mediated cascades. Overexpression of TRIM59 has been documented in various cancers such as gastric, lung, and breast carcinoma, where it promotes cell proliferation, invasion, and resistance to apoptosis.

Studies using the TRIM59 antibody have revealed that TRIM59 acts as an oncogenic factor by promoting ubiquitin-dependent degradation of p53, thereby suppressing apoptosis and enhancing tumor growth. Additionally, TRIM59 participates in innate immune signaling by modulating the STING and NF-kB pathways, influencing cytokine production during viral infection. Western blot analysis typically shows a band at approximately 42-48 kDa. Immunofluorescence using this antibody reveals diffuse cytoplasmic staining, occasionally enriched in perinuclear compartments.

TRIM59 functions as part of a larger regulatory network controlling inflammation and autophagy. It has been associated with epigenetic modulation through interactions with chromatin-remodeling factors, affecting transcriptional activation of oncogenes. In cancer models, TRIM59 depletion suppresses tumor cell migration and enhances p53-dependent growth inhibition. NSJ Bioreagents offers a validated TRIM59 antibody optimized for western blot, immunohistochemistry, and immunofluorescence. This reagent supports mechanistic studies linking ubiquitination, cell signaling, and oncogenesis.

Application Notes

Optimal dilution of the TRIM59 antibody should be determined by the researcher.

Immunogen

E.coli-derived human TRIM59 recombinant protein (Position: E71-S313) was used as the immunogen for the TRIM59 antibody.

Storage

After reconstitution, the TRIM59 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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