RNF25 Antibody / Ring finger protein 25 (FY12996)

Catalog No.	Formulation	Size
FY12996	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
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	Q96BH1
Applications	ELISA : 0.1-0.5ug/ml Flow Cytometry : 1-3ug/million cells Immunofluorescence : 5ug/ml Immunohistochemistry : 2-5ug/ml Western Blot : 0.25-0.5ug/ml
Limitations	This RNF25 antibody is available for research use only.

Description

RNF25 antibody detects Ring finger protein 25, an E3 ubiquitin ligase that participates in protein degradation, signaling regulation, and transcriptional control. The UniProt recommended name is Ring finger protein 25 (RNF25). This protein belongs to the RING-type E3 ligase family, which mediates the transfer of ubiquitin from E2 conjugating enzymes to substrate proteins, marking them for proteasomal degradation or signaling modification.

Functionally, RNF25 antibody identifies a 459-amino-acid cytoplasmic and nuclear protein containing a C3H2C3-type RING finger domain essential for ubiquitin ligase activity. RNF25 acts as a regulatory adapter that promotes the assembly of ubiquitin ligase complexes and modulates the stability of key signaling molecules. It interacts with components of the NF-kappaB signaling pathway, such as TRAF2 and RelA/p65, thereby influencing inflammatory gene expression and apoptosis.

The RNF25 gene is located on chromosome 15q22.31 and encodes a protein expressed in multiple tissues, including brain, liver, and immune cells. It functions in the ubiquitin-proteasome system to regulate protein turnover and signaling

dynamics. RNF25 has been shown to enhance NF-kappaB transcriptional activity by stabilizing the p65 subunit, amplifying responses to cytokines and stress stimuli. It may also participate in synaptic signaling and neuronal plasticity through regulation of protein degradation in neurons.

Beyond its role in NF-kappaB signaling, RNF25 influences other cellular processes such as apoptosis, transcriptional repression, and immune modulation. It interacts with Smurf1 and other E3 ligases to fine-tune ubiquitin-dependent degradation networks. Dysregulation of RNF25 expression or activity has been linked to cancer progression, chronic inflammation, and neurodegenerative disease. Overexpression of RNF25 promotes survival pathways, while loss of function increases sensitivity to apoptotic stimuli.

RNF25 antibody is widely used in research focused on protein degradation, signal transduction, and transcriptional regulation. It is suitable for western blotting, immunoprecipitation, and immunofluorescence to detect RNF25 expression and localization. This antibody supports studies exploring the ubiquitin-proteasome system, NF-kappaB activation, and E3 ligase interactions. In disease models, RNF25 serves as a biomarker of altered ubiquitin signaling and inflammatory response.

Structurally, RNF25 features a RING-type zinc-binding domain, a coiled-coil region for protein interactions, and nuclear localization motifs that enable shuttling between cytoplasm and nucleus. Post-translational regulation includes phosphorylation and auto-ubiquitination that modulate its ligase activity. NSJ Bioreagents provides RNF25 antibody reagents validated for use in ubiquitin signaling, transcriptional regulation, and immune pathway research.

Application Notes

Optimal dilution of the RNF25 antibody should be determined by the researcher.

Immunogen

E.coli-derived human RNF25 recombinant protein (Position: E44-R344) was used as the immunogen for the RNF25 antibody.

Storage

After reconstitution, the RNF25 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.