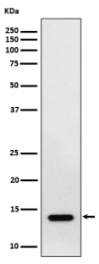
RNF7 Antibody / Ring finger protein 7 [clone 30R91] (FY12880)

Catalog No.	Formulation	Size
FY12880	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30R91
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q9UBF6
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry : 1:50-1:200 Immunocytochemistry/Immunofluorescence : 1:50-1:200
Limitations	This RNF7 antibody is available for research use only.



Western blot analysis of RNF7 expression in human HepG2 cell lysate. Predicted molecular weight ~13 kDa.

Description

RNF7 antibody detects Ring finger protein 7, encoded by the RNF7 gene. Ring finger protein 7 is a small RING type E3

ubiquitin ligase that is an essential component of the SCF (SKP1 CUL1 F box) ubiquitin ligase complex. This complex targets key regulatory proteins for ubiquitin mediated degradation, ensuring proper cell cycle progression, signal transduction, and stress responses. RNF7 antibody allows researchers to study the regulation of protein turnover and the molecular machinery that controls cellular homeostasis through ubiquitination.

Ring finger protein 7 has multiple cellular roles, including redox regulation, neddylation, and tumor suppressor control. By facilitating ubiquitination, RNF7 ensures timely degradation of proteins such as p27 and IkappaB, which govern cell cycle checkpoints and NF kappa B signaling respectively. Studies using RNF7 antibody have shown that disruption of this E3 ligase leads to aberrant accumulation of these regulators, causing uncontrolled proliferation or impaired immune responses. RNF7 also interacts with antioxidant pathways by mediating degradation of pro oxidant proteins, supporting redox balance in the cell.

Altered expression of Ring finger protein 7 has been implicated in cancer and degenerative diseases. Overexpression of RNF7 has been reported in several human cancers, including prostate, pancreatic, and lung carcinoma, where it may promote tumorigenesis by reducing levels of pro apoptotic proteins. Conversely, loss of function mutations impair ubiquitin ligase activity, leading to genomic instability. RNF7 antibody has been applied to studies that link this factor to chemotherapy resistance and cancer progression, making it an attractive target for drug discovery.

RNF7 antibody is widely used in western blotting, immunohistochemistry, and immunoprecipitation. Western blotting detects expression in cancer cell lines, while immunohistochemistry demonstrates its nuclear and cytoplasmic distribution in tissue sections. Immunoprecipitation with RNF7 antibody enables isolation of the SCF complex for functional studies. Together, these applications allow researchers to investigate its role in proteostasis, stress response, and tumor biology.

By providing validated RNF7 antibody reagents, NSJ Bioreagents supports research into ubiquitin ligase function, cancer mechanisms, and redox biology, ensuring accurate detection of Ring finger protein 7 across diverse experimental systems.

Application Notes

Optimal dilution of the RNF7 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human RNF7 was used as the immunogen for the RNF7 antibody.

Storage

Store the RNF7 antibody at -20oC.