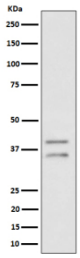
UFD1L Antibody / Ubiquitin Fusion Degradation 1 Like [clone 29U95] (FY13177)

Catalog No.	Formulation	Size
FY13177	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	29U95
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	Q92890
Applications	Western blot: 1:500-1:2000 Immunocytochemistry/Immunofluorescence: 1:50-1:200 Flow Cytometry: 1:50
Limitations	This UFD1L antibody is available for research use only.



Western blot analysis of UFD1L expression in human HeLa cell lysate using UFD1L antibody. UFD1L antibody detects two bands at ~35 kDa and ~38-40 kDa, consistent with hypo- and hyper-phosphorylated forms of UFD1.

Description

UFD1L antibody detects Ubiquitin fusion degradation protein 1 like, encoded by the UFD1L gene. Ubiquitin fusion degradation protein 1 like forms a complex with NPL4 and the ATPase p97/VCP to regulate extraction of ubiquitinated substrates from membranes and protein complexes. This activity is essential for protein quality control, endoplasmic reticulum associated degradation, and mitotic progression. UFD1L antibody provides researchers with an important tool for studying ubiquitin signaling, proteostasis, and cell cycle regulation.

The UFD1L-NPL4-p97 complex functions as a segregase, using ATP hydrolysis to unfold and extract ubiquitinated proteins for degradation by the proteasome. Research using UFD1L antibody has demonstrated that this complex acts in multiple pathways, including clearance of misfolded proteins from the endoplasmic reticulum, disassembly of protein aggregates, and regulation of spindle assembly during mitosis. Its versatile roles make UFD1L a central hub in protein quality control networks.

Mutations and deletions involving UFD1L are associated with genetic disorders. Studies with UFD1L antibody have shown that haploinsufficiency contributes to DiGeorge syndrome, a developmental disorder characterized by congenital heart defects, immune dysfunction, and craniofacial anomalies. Because UFD1L is located in the 22q11 region, deletions that remove this gene disrupt proteostasis during development, contributing to disease phenotypes.

In cancer biology, UFD1L has been implicated in regulating cell proliferation and survival. Research using UFD1L antibody has revealed that overexpression enhances proteasomal degradation of regulatory proteins, supporting uncontrolled growth. Conversely, loss of function can cause accumulation of toxic aggregates, impairing viability. These dual roles highlight its importance in maintaining balanced proteostasis across different contexts.

UFD1L antibody is widely used in western blotting, immunohistochemistry, and immunoprecipitation. Western blotting identifies endogenous levels, immunohistochemistry localizes expression in developmental tissues, and immunoprecipitation demonstrates interactions with p97/VCP and NPL4. These applications make UFD1L antibody essential in both developmental and disease research.

By supplying validated UFD1L antibody reagents, NSJ Bioreagents supports studies into proteostasis, ER associated degradation, and developmental biology. Detection of Ubiquitin fusion degradation protein 1 like provides insight into how protein quality control influences health and disease.

Application Notes

Optimal dilution of the UFD1L antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human UFD1L was used as the immunogen for the UFD1L antibody.

Storage

Store the UFD1L antibody at -20oC.

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