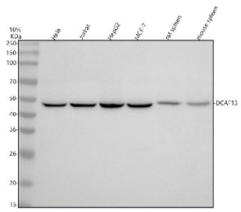
DCAF13 Antibody / DDB1- and CUL4-associated factor 13 [clone 32D85] (FY13303)

Catalog No.	Formulation	Size
FY13303	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	32D85
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	Q9NV06
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry : 1:50-1:200 Immunoprecipitation : 1:50
Limitations	This DCAF13 antibody is available for research use only.



Western blot analysis of DCAF13 using anti-DCAF13 antibody. Lane 1: human Hela whole cell lysates, Lane 2: human Jurkat whole cell lysates, Lane 3: human HepG2 whoel cell lysates, Lane 4: human MCF-7 whole cell lysates, Lane 5: rat spleen tissue lysates, Lane 6: mouse spleen 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-DCAF13 antibody at 1:500 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 1:500 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. A predominant band is detected between approximately 45 and 48 kDa in all samples, running slightly below the predicted ~51 kDa mass but consistent with the apparent molecular weight of the processed nuclear WD repeat protein DCAF13.

Description

DCAF13 antibody detects DDB1- and CUL4-associated factor 13, encoded by the DCAF13 gene. DDB1- and CUL4-associated factor 13 is a substrate receptor for the CUL4-DDB1 E3 ubiquitin ligase complex, directing ubiquitination and degradation of specific proteins. DCAF13 antibody provides researchers with a key reagent to study ubiquitin-mediated proteolysis, cell cycle regulation, and cancer biology.

DDB1- and CUL4-associated factor 13 belongs to the family of WD repeat proteins that serve as adaptors for CUL4-based E3 ligases. Research using DCAF13 antibody has shown that it recognizes substrates and recruits them to the ligase complex, ensuring precise turnover of proteins that regulate transcription and cell cycle progression. This function is critical for maintaining protein homeostasis and genomic stability.

Studies with DCAF13 antibody have revealed that it plays roles in embryonic development and tumorigenesis. In embryonic cells, DCAF13 supports proliferation by targeting key regulators of transcription and signaling for degradation. In cancers, overexpression of DCAF13 enhances tumor growth and survival by destabilizing tumor suppressor proteins. These observations highlight the importance of DDB1- and CUL4-associated factor 13 in growth control and oncogenesis.

DCAF13 has also been implicated in stress responses. Research using DCAF13 antibody has demonstrated that the protein participates in DNA damage repair pathways, regulating protein stability during genotoxic stress. By coordinating protein turnover with DNA repair, DCAF13 contributes to genome integrity.

DCAF13 antibody is applied in western blotting, immunohistochemistry, and immunofluorescence. Western blotting detects endogenous protein levels, immunohistochemistry reveals expression in proliferative tissues, and immunofluorescence highlights nuclear localization consistent with transcriptional regulation. These approaches make DCAF13 antibody valuable for investigating ubiquitin signaling and cancer biology.

By supplying validated DCAF13 antibody reagents, NSJ Bioreagents supports research into protein degradation, cell cycle regulation, and oncogenesis. Detection of DDB1- and CUL4-associated factor 13 provides insights into how E3 ligase adaptors regulate cellular function and disease.

Application Notes

Optimal dilution of the DCAF13 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human DCAF13 was used as the immunogen for the DCAF13 antibody.

Storage

Store the DCAF13 antibody at -20oC.