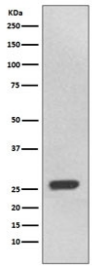
UCHL3 Antibody / Ubiquitin C-terminal hydrolase L3 [clone BGE-21] (RQ5449)

Catalog No.	Formulation	Size
RQ5449	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-2 weeks
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	BGE-21
Purity	Affinity purified
UniProt	P15374
Applications	Western Blot : 1:1000-1:2000
Limitations	This UCHL3 antibody is available for research use only.



Western blot testing of human 293T cell lysate with UCHL3 antibody. Predicted molecular weight ~26 kDa.

Description

UCHL3 antibody targets Ubiquitin C-terminal hydrolase L3, encoded by the UCHL3 gene. Ubiquitin C-terminal hydrolase L3 is an intracellular deubiquitinating enzyme that plays a key role in ubiquitin recycling and regulation of ubiquitin-dependent signaling pathways. As a member of the UCH family, it contributes to fine control of protein fate by cleaving ubiquitin from modified substrates.

Ubiquitin C-terminal hydrolase L3 is involved in maintaining the balance between ubiquitination and deubiquitination, processes that are essential for controlling protein degradation, trafficking, and signaling duration. By restoring free ubiquitin from conjugated forms, UCHL3 indirectly supports proteasome function and broader cellular proteostasis. A UCHL3 antibody is useful for examining enzymatic regulation within the ubiquitin-proteasome network.

Expression of UCHL3 has been reported in diverse cell types, consistent with its role in fundamental cellular maintenance rather than specialized tissue-specific functions. The protein localizes predominantly to the cytoplasm, where it can interact with ubiquitinated substrates involved in signaling cascades and stress response pathways. Its activity may fluctuate with cellular conditions that alter protein turnover demands.

In disease-related research, Ubiquitin C-terminal hydrolase L3 has been studied in the context of tumor biology and cellular stress adaptation. Dysregulation of deubiquitinating enzymes can lead to accumulation of aberrant proteins or inappropriate stabilization of regulatory factors, contributing to disease progression. UCHL3 is therefore of interest in studies exploring how ubiquitin system imbalance influences cellular survival and adaptation.

At the structural level, Ubiquitin C-terminal hydrolase L3 contains conserved active-site residues required for thiol protease activity. Experimental detection may reveal differences in apparent behavior depending on cellular state or substrate engagement rather than changes in protein size or sequence. UCHL3 antibody reagents enable investigation of deubiquitination pathways and ubiquitin signaling dynamics, with NSJ Bioreagents providing reagents intended for research use.

Application Notes

Optimal dilution of the UCHL3 antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human UCHL3 was used as the immunogen for the UCHL3 antibody.

Storage

Store the UCHL3 antibody at -20oC.