novex®
by life technologies™

ABfinity™ Ubiquitin Recombinant Rabbit Monoclonal Antibody

Store at 2°C to 8°C (short-term), or –20°C (long-term)

Catalog Number: 701339

Pub. No. MAN0007433 **Rev.** 1.00

Clonality:	Monoclonal	**Quantity:**	100 µg	**Volume**: 200 µL	**Concentration:** 0.5 mg/mL
Host/Class:	Rabbit IgG	**Reactivity:**	Human Ubiquitin	**Predicted Reactivity:** Human	

Product Description

Ubiquitin is a conserved 76 amino acid polypeptide and can affect proteasomal degradation of the protein it is bound to, or mediate interactions with other proteins related to posttranslation modifications. The degradation of cellular regulatory proteins by the ubiquitin pathway is important as it controls the cellular growth and proliferation. Ubiquitin dependent proteolysis occurs after a covalent attachment of the peptide to a lysine residue of a protein, which involves three enzymatic reactions: E1, E2 and E3. First reaction involves ubiquitin-activating enzyme (E1) to form a high enery thioester between the cysteine on E1 and the C-terminal glycine residue on ubiquitin. The second reaction transfers the ubiquitin thioester complex to the ubiquitin-conjugating enzyme (E2). The third reaction uses enzyme ubiquitin ligase (E3) to transfer the activated ubiquitin from E2 to a lysine residue on a protein, or directly transfers the ubiquitin from E2 to the substrate.

Product Specifications

Immunogen:	Peptide corresponding to amino acids 32–58 of human ubiquitin
Alternate Names:	UBB,CEP80, UBA80
Apparent MW:	~9 kDa
Gene ID:	7314
Protein Accession No.:	P0CG47
Sequence Identity:	Human
Sequence Homology:	Chimpanzee, Gorilla, Monkey, Rabbbit, Horse, Pig, Sheep, Bovine
Clone/PAD:	10H4L21
Lot:	See product label

Product Applications

Application	Species	Test Material	Concentration
Western blotting	Human	Raji and Jurkat cells	2–3 µg/ mL
Immunocyto chemistry	Human	U2OS cells	1 µg/mL
Indirect ELISA	Human	Peptide	1.5×10^{-4} to 3 µg/mL

Storage and Handling

Store the antibody at 2°C to 8°C for up to 1 month, –20°C for long storage. Avoid repeated freezing and thawing.

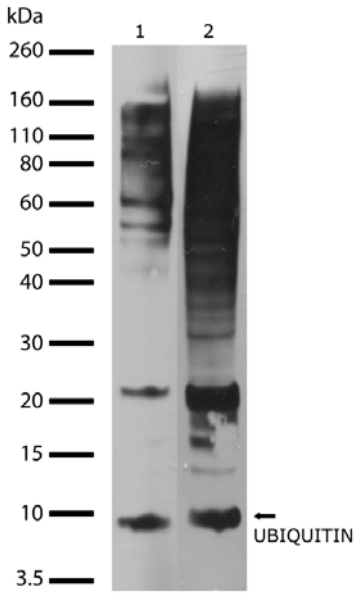

Figure 1 Western blot analysis of ABfinity™ Ubiquitin Recombinant Rabbit Monoclonal Antibody (Cat. no. 701339).

Western blot analysis was performed on whole cell extracts from Raji cells (**Lane 1**) and Jurkat cells (**Lane 2**) . Endogenous levels of ubiquitin was detected at ~9 kDa using ABfinity™ Ubiquitin Recombinant Rabbit Monoclonal Antibody at a concentration of 2 µg/mL. The higher molecular weight bands represent ubiquitinated proteins. The blot was developed using enhanced chemiluminescence (ECL) method.

Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

CAUTION! Sodium azide is extremely toxic and may react with lead and copper plumbing to form highly explosive metal azides. Properly dispose of solutions containing sodium azide. Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. SDSs are available at **www.lifetechnologies.com/support**.

Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: techsupport@lifetech.com

Product Documentation

To obtain a Certificate of Analysis or SDS, visit **www.lifetechnologies.com/support**.

Related Products

Product Name	Quantity	Catalog No.
iBlot® Dry Blotting System	1 unit	IB1001
WesternBreeze® Chromogenic Kit Anti-Rabbit	1 kit	WB7105
WesternBreeze® Chemiluminescent Kit, Anti-Rabbit	1 kit	WB7106

Limited Product Warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at **www.lifetechnologies.com/termsandconditions**. If you have any questions, please contact Life Technologies at **www.lifetechnologies.com/support**.

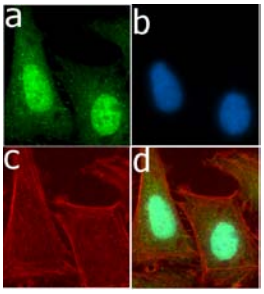

Figure 2 Immunocytochemistry analysis of ABfinity™ Ubiquitin Recombinant Rabbit Monoclonal Antibody (Cat. no. 701339).

Immunocytochemistry analysis of U2OS cells stained with ABfinity™ Ubiquitin Recombinant Rabbit Monoclonal Antibody, using **a:** Alexa Fluor® 488 goat anti-rabbit as a secondary antibody (green). **b:** DAPI stained U2OS nuclei (blue). **c:** Actin stained with Alexa Fluor® 594 phalloidin (red). **d:** Composite image of cells showing cytoplasmic and nuclear localization of ubiquitin.

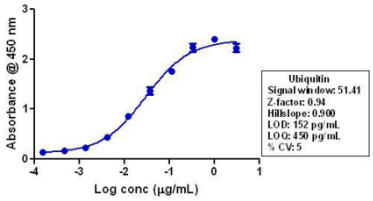

Figure 3 Indirect ELISA of ABfinity™ Ubiquitin Recombinant Rabbit Monoclonal Antibody (Cat. no. 701339).

Indirect ELISA was performed using various dilutions of ABfinity™ Ubiquitin Recombinant Rabbit Monoclonal Antibody to detect ubiquitin peptide coated onto the plate. A non-linear regression analysis was performed (4 PL), LOD and LOQ for the antibody was determined.

Explanation of symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer	REF	Catalog number	LOT	Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

Limited Use Label License No. 327: Recombinant Antibody Technology

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