

UBC13 (Ubiquitin-conjugating enzyme E2N). Rabbit Polyclonal Antibody , Human, Mouse, Rat

Ubiquitin-protein ligase N, Ubiquitin carrier protein N, Ubc13, Bendless-like ubiquitin-conjugating enzyme

BACKGROUND

Ubiquitin-conjugating enzyme 13 (Ubc13) was initially discovered in *S. cerevisiae* as a DNA-damage inducible protein involved in the error-free DNA postreplication repair pathway (1). It has recently been shown to be an important component of the Toll-like receptor and IL-1R signaling pathway (reviewed in 2). Signals from these pathways are relayed by a number of downstream molecules such as MyD88 and tumor necrosis factor receptor associated factor (TRAF6), ultimately activating various kinases and transcription factors (2,3). Ubc13 is part of a dimeric ubiquitin-conjugating enzyme complex also containing UEV1A (ubiquitin-conjugating enzyme E2 variant 1) that together with TRAF6 activates TAK1, a member of the mitogen-activated protein kinase kinase kinase family (4-6). The Ubc13-UEV1A complex also mediates the Lys-63 ubiquitination of TRAF-6, and this ubiquitination is essential for TAK1 activation (5).

ORDERING INFORMATION

CATALOG NUMBER
X1828P

SIZE
100 µg

FORM
Unconjugated

HOST/CLONE
Rabbit

FORMULATION
Provided as solution in phosphate buffered saline with 0.02% sodium azide

CONCENTRATION
0.5 mg/ml

ISOTYPE
IgG

APPLICATIONS
Western Blot, Immunohistochemistry

IMMUNOGEN

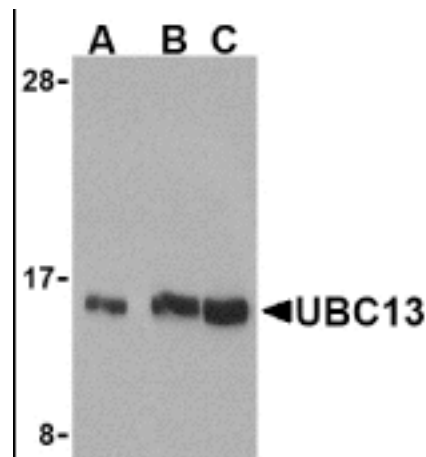
Rabbit polyclonal UBC13 antibody was raised against a peptide corresponding to 15 amino acids near the C-terminus of human UBC13.

SPECIES REACTIVITY

Human, Mouse, Rat

Legend:

Western blot analysis of UBC13 in human small intestine cell lysates with UBC13 antibody at (A) 0.5, (B) 1, and (C) 2 µg/ml.



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POSITIVE CONTROL/TISSUE EXPRESSION

Positive Control: HepG2 Cell Lysate, also Human Small Intestine Tissue Lysate

COMMENTS

UBC13 antibody can be used for detection of UBC13 by Western blot at 0.5 to 1 ug/ml.

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

- 1) Brusky J, Zhu Y, and Xiao W. UBC13, a DNA-damageinducible gene, is a member of the error-free postreplication repair pathway in *Saccharomyces cerevisiae*. *Curr. Genet.* 2000; 37:168-74.
- 2) Akira S and Takeda K. Toll-like receptor Signalling. *Nat. Rev. Immunol.* 2004; 4:499-511.
- 3) Vogel SN, Fitzgerald KA, and Fenton MJ. TLRs: differential adapter utilization by toll-like receptors mediates TLR-specific patterns of gene expression. *Mol. Interv.* 2003; 3:466-77.
- 4) Deng L, Wang C, Spencer E, et al. Activation of the I κ B kinase complex by TRAF6 requires a dimeric ubiquitin-conjugating enzyme complex and a unique polyubiquitin chain. *Cell* 2000; 103:351-61.
- 5) Wang C, Deng L, Hong M, et al. TAK1 is a ubiquitindependent kinase of MKK and IKK. *Nature* 2001; 412:346-51.
- 6) amaguchi K, Shirakabe K, Shibuya H, et al. Identification of a member of the MAPKKK family as a potential mediator of TGF- β signal transduction. *Science* 1995; 270:2008-11. (RD1005)
- 7) UniProtKB/Swiss-Prot entry P61088, <http://cn.expasy.org/uniprot/P61088>, Accessedn February 22, 2007.

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