

UBC13 Antibody

UBC13: Ubiquitin-conjugating enzyme E2N

CATALOG No.: 3373

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 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).

SOURCE:

Rabbit polyclonal UBC13 antibody was raised against a peptide corresponding to 15 amino acids near the C-terminus of human UBC13 (GenBank accession no. AAP35519).

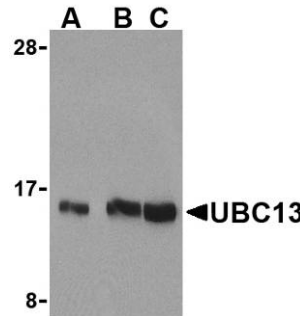
APPLICATION:

UBC13 antibody can be used for detection of UBC13 by Western blot at 0.5 to 1 µg/ml. (Optimal dilution should be determined by user.) UBC13 antibody is human, mouse, and rat reactive. Human small intestine or HepG2 cell lysate can be used as a positive control.

For research use only.

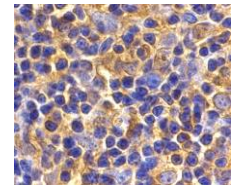
STORAGE:

UBC13 antibody is supplied as ion exchange chromatography purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year. Azide free antibody is available.



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.

Immunohistochemistry of UBC13 in mouse thymus tissue with UBC13 antibody at 2 µg/ml.



RELATED PRODUCTS:

Blocking peptide, Catalog No. **3373P**.

Human Small Intestine cell lysate, Catalog No. **1308**.

MyD88 Antibody (CT), Catalog No. **2127**.

UEV1A Antibody, Catalog No. **3375**.

TAK1 Antibody (NT), Catalog No. **3385**.

REFERENCES:

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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 IκappaB 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 ubiquitin-dependent kinase of MKK and IKK. *Nature* 2001; 412:346-51.
6. Yamaguchi 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.

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