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Anti-UBC13 [GOAT] Antibody
UBC13 Antibody
Catalog # ASR5094

Specification

Anti-UBC13 [GOAT] Antibody - Product Information

Host	**Goat**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 17 kDa in size corresponding to UBC13 protein by western blotting in the appropriate tissue or cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 30-55 of human UBC13 protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-UBC13 [GOAT] Antibody - Additional Information

Gene ID 7334

Other Names
7334

Purity
This affinity-purified antibody is directed against human UBC13 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with UBC13 protein from a broad range of sources including human, dog, bovine, Xenopus laevis, Xenopus tropicalis, , zebrafish, rat, mouse, chimpanzee, macaque and chicken based on 100% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted

liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-UBC13 [GOAT] Antibody - Protein Information

Name UBE2N

Synonyms BLU

Function
The UBE2V1-UBE2N and UBE2V2-UBE2N heterodimers catalyze the synthesis of non-canonical 'Lys-63'-linked polyubiquitin chains. This type of polyubiquitination does not lead to protein degradation by the proteasome. Mediates transcriptional activation of target genes. Plays a role in the control of progress through the cell cycle and differentiation. Plays a role in the error-free DNA repair pathway and contributes to the survival of cells after DNA damage. Acts together with the E3 ligases, HLTF and SHPRH, in the 'Lys-63'-linked poly- ubiquitination of PCNA upon genotoxic stress, which is required for DNA repair. Appears to act together with E3 ligase RNF5 in the 'Lys-63'- linked polyubiquitination of JKAMP thereby regulating JKAMP function by decreasing its association with components of the proteasome and ERAD. Promotes TRIM5 capsid-specific restriction activity and the UBE2V1- UBE2N heterodimer acts in concert with TRIM5 to generate 'Lys-63'- linked polyubiquitin chains which activate the MAP3K7/TAK1 complex which in turn results in the induction and expression of NF-kappa-B and MAPK-responsive inflammatory genes. Together with RNF135 and UB2V1, catalyzes the viral RNA-dependent 'Lys-63'-linked polyubiquitination of RIGI to activate the downstream signaling pathway that leads to interferon beta production (PubMed:28469175, PubMed:31006531). UBE2V1- UBE2N together with TRAF3IP2 E3 ubiquitin ligase mediate 'Lys-63'- linked polyubiquitination of TRAF6, a component of IL17A-mediated signaling pathway.

Cellular Location
Nucleus. Cytoplasm

Anti-UBC13 [GOAT] Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-UBC13 [GOAT] Antibody - Images

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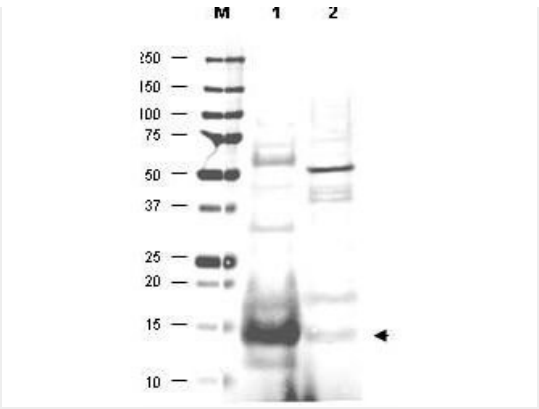

Western blot using Rockland's affinity purified anti-UBC13 antibody shows detection of UBC13 protein in human small intestine lysate (lane 1) but not in mouse thymus lysate (lane 2). The heavily stained band in lane 1 (arrowhead) indicates this particular gel was overloaded with protein. The identity of minor reactive bands is unknown but could represent E2 complexes. Each lane contains approximately 20 ug of lysate. Primary antibody was used at a 1:500 dilution. The membrane was washed and reacted with a 1:10,000 dilution of Alexa FluorTM 680 conjugated Rb-a-Goat IgG. Molecular weight estimation was made by comparison to prestained MW markers indicated at the left (lane M). Other detection systems will yield similar results.

Anti-UBC13 [GOAT] Antibody - Background

UBC13 is a member of the E2 ubiquitin-conjugating enzyme family also known as Ubiquitin-conjugating enzyme E2 N, Ubiquitin-protein ligase N, Ubiquitin carrier protein N and Bendless-like ubiquitin-conjugating enzyme. The modification of proteins with ubiquitin is an important cellular mechanism for targeting abnormal or short-lived proteins for degradation. Ubiquitination involves at least three classes of enzymes: ubiquitin-activating enzymes, or E1s, ubiquitin-conjugating enzymes, or E2s, and ubiquitin-protein ligases, or E3s. This gene encodes a member of the E2 ubiquitin-conjugating enzyme family. UBC13 plays a role in cell cycle, differentiation, cell survival, and DNA repair. Anti-UBC13 Antibody is useful for researchers interested in Interferon gamma signaling, TLR4 signaling, RND binding, and ubiquitin protein activities.