

## **UEV1A Antibody**

Catalog # ASC10263

## **Specification**

## **UEV1A Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, E
O13404
NP\_954595, 40806167
Human, Mouse, Rat
Rabbit
Polyclonal

IgG

UEV1A antibody can be used for detection of UEV1A by Western blot at 1 to 4  $\mu$ g/mL.

## **UEV1A Antibody - Additional Information**

Gene ID **7335** 

**Other Names** 

UEV1A Antibody: CIR1, UEV1, CROC1, UBE2V, UEV-1, UEV1A, CROC-1, P/OKcl.19, Ubiquitin-conjugating enzyme E2 variant 1, ubiquitin-conjugating enzyme E2 variant 1

## **Target/Specificity**

UBE2V1; Anti-UEV1A may also recognize other isoforms of UEV1A.

## **Reconstitution & Storage**

UEV1A antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

## **Precautions**

UEV1A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **UEV1A Antibody - Protein Information**

Name UBE2V1

Synonyms CROC1, UBE2V, UEV1

### **Function**

Has no ubiquitin ligase activity on its own. The UBE2V1-UBE2N heterodimer catalyzes the synthesis of non-canonical poly-ubiquitin chains that are linked through Lys-63. This type of poly-ubiquitination activates IKK and does not seem to involve protein degradation by the proteasome. Plays a role in the activation of NF-kappa-B mediated by IL1B, TNF, TRAF6 and TRAF2. 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. Promotes TRIM5 capsid-specific restriction activity and the UBE2V1- UBE2N heterodimer acts in concert with TRIM5 to generate 'Lys-63'- linked



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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 UBE2N, catalyzes the viral RNA-dependent 'Lys-63'-linked polyubiquitination of RIGI to activate the downstream signaling pathway that leads to interferon beta production (PubMed: <a href="http://www.uniprot.org/citations/31006531" target="\_blank">31006531</a>). 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. Note=Excluded from the nucleolus

#### **Tissue Location**

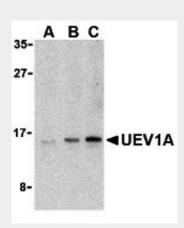
Highly expressed in thyroid, pancreas, spinal cord, lymph node, trachea, adrenal gland, bone marrow and pancreas. Detected at low levels in heart, breast, placenta, brain, liver, kidney, stomach and lung.

### **UEV1A Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **UEV1A Antibody - Images**



Western blot analysis of UEV1A in Jurkat cell lysates with UEV1A antibody at (A) 1, (B) 2, and (C) 4 μg/mL.

### **UEV1A Antibody - Background**

UEV1A Antibody: Ubiquitin-conjugating enzyme E2 (UEV1) was initially discovered as a protein similar in sequence and structure to the E2 ubiquitin-conjugating enzymes but lacking their enzymatic activity. There are at least two variants and multiple isoforms of UEV1. In particular, UEV1A (Ubiquitin-conjugating enzyme E2 variant 1 isoform A) has recently been shown to be an important component of the Toll-like receptor and IL-1R signaling pathway. Signals from these





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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. UEV1A is part of a dimeric ubiquitin-conjugating enzyme complex also containing Ubc13 (ubiquitin-conjugating enzyme 13) that together with TRAF6 activates TAK1, a member of the mitogen-activated protein kinase kinase kinase family. The Ubc13-UEV1A complex also mediates the Lys-63 ubiquitination of TRAF-6, and this ubiquitination is essential for TAK1 activation.

# **UEV1A Antibody - References**

Sancho E, Vila MR, Sanchez-Pulido L, et al. Role of UEV-1, an inactive variant of the E2 ubiquitin-conjugating enzymes, in in vitro differentiation and cell cycle behavior of HT-29-M6 intestinal mucosecretory cells. Mol. Cell Biol. 1998; 18:576-89.

Akira S and Takeda K. Toll-like receptor Signalling. Nat. Rev. Immunol. 2004; 4:499-511. 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.

Deng L, Wang C, Spencer E, et al. Activation of the IkB kinase complex by TRAF6 requires a dimeric ubiquitin-conjugating enzyme complex and a unique polyubiquitin chain. Cell 2000; 103:351-61.