

UEV1A Antibody

Catalog # ASC10263

Product Information

Application	WB, E
Primary Accession	Q13404
Other Accession	NP_954595 , 40806167
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	16495
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	UEV1A antibody can be used for detection of UEV1A by Western blot at 1 to 4 μ g/mL.

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.

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 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:[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. 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.

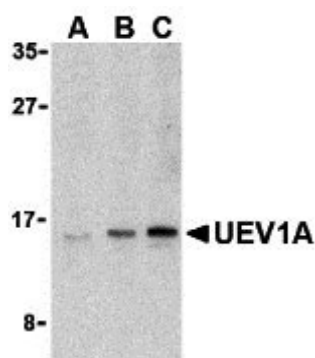
Background

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 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.

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 I κ B kinase complex by TRAF6 requires a dimeric ubiquitin-conjugating enzyme complex and a unique polyubiquitin chain. *Cell* 2000; 103:351-61.

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.