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UBE2V1 (CROC1A) Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP2164b

Specification

UBE2V1 (CROC1A) Antibody (C-term) Blocking peptide - Product Information

Primary Accession Q13404

UBE2V1 (CROC1A) Antibody (C-term) Blocking peptide - Additional Information

Gene ID 7335

Other Names
Ubiquitin-conjugating enzyme E2 variant 1, UEV-1, CROC-1, TRAF6-regulated IKK activator 1 beta Uev1A, UBE2V1, CROC1, UBE2V, UEV1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2164b was selected from the C-term region of human CROC1A . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

UBE2V1 (CROC1A) Antibody (C-term) Blocking peptide - 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.

UBE2V1 (CROC1A) Antibody (C-term) Blocking peptide - Protocols

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

- Blocking Peptides

UBE2V1 (CROC1A) Antibody (C-term) Blocking peptide - Images

UBE2V1 (CROC1A) Antibody (C-term) Blocking peptide - Background

Ubiquitin is a 76 amino acid highly conserved eukaryotic polypeptide that selectively marks cellular proteins for proteolytic degradation by the 26S proteasome. The process of target selection, covalent attachment and shuttle to the 26S proteasome is a vital means of regulating the concentrations of key regulatory proteins in the cell by limiting their lifespans. Polyubiquitination is a common feature of this modification. Serial steps for modification include the activation of ubiquitin, an ATP-dependent formation of a thioester bond between ubiquitin and the enzyme E1, transfer by transacylation of ubiquitin from E1 to the ubiquitin conjugating enzyme E2, and covalent linkage to the target protein directly by E2 or via E3 ligase enzyme. Deubiquitination enzymes also exist to reverse the marking of protein substrates. Posttranslational tagging by Ub is involved in a multitude of cellular processes, including the cell cycle, cell growth and differentiation, embryogenesis, apoptosis, signal transduction, DNA repair, regulation of transcription and DNA replication, transmembrane transport, stress responses, the immune response, and nervous system functions.