

## UBE2V1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58789

## **Product Information**

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity	IHC-P, IHC-F, IF, E Q13404 Rat, Pig Rabbit Polyclonal 16495 Liquid KLH conjugated synthetic peptide derived from human UBE2V1 51-147/147 IgG affinity purified by Protein A
Buffer SUBCELLULAR LOCATION SIMILARITY SUBUNIT	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Nucleus. Note=Excluded from the nucleolus. Belongs to the ubiquitin-conjugating enzyme family. Heterodimer with UBE2N. Interacts (UBE2V2-UBE2Nheterodimer) with the E3 ligase STUB1 (via the U-box domain); thecomplex has a specific 'Lys-63'-linked polyubiquitination activity.Interacts with TRAF6.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

## **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	Highly expressed in thyroid, pancreas, spinalcord, lymph node, trachea, adrenal gland, bone marrow and pancreas.Detected at low levels in heart, breast, placenta, brain, liver,kidney, stomach and lung.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=2ug/Test,ELISA=1:50

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Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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: <u>31006531</u> ). 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.

## Images



Blank control: K562.

Primary Antibody (green line): Rabbit Anti-UBE2V1 antibody (AP58789)

Dilution: 2 µg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF488 Dilution: 1  $\mu$ g /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at-20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at





room temperature. Acquisition of 20,000 events was performed.

Paraformaldehyde-fixed, paraffin embedded (human thyroid gland); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (UBE2V1) Polyclonal Antibody, Unconjugated (AP58789) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Blank control:K562.

Primary Antibody (green line): Rabbit Anti-UBE2V1 antibody (AP58789)

Dilution: 2 µg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-PE Dilution: 1  $\mu$ g /test. Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

Paraformaldehyde-fixed, paraffin embedded (rat thyroid gland); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (UBE2V1) Polyclonal Antibody, Unconjugated (AP58789) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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