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BTRC2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58987

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9UKB1
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	62091
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human BTRC2/beta TRCP2
Epitope Specificity	1-100/542
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus.
SIMILARITY	Contains 1 F-box domain. Contains 7 WD repeats.
SUBUNIT	Self-associates. Component of the SCF(FBXW11) complex formed of CUL1, SKP1, RBX1 and a FBXW11 dimer. Interacts with BTRC, BST2, PER1, RCAN1 and USP47. Interacts with phosphorylated ubiquitination substrate PER2 (By similarity). Interacts with phosphorylated ubiquitination substrates CTNNB1, NFKBIA, IFNAR1; the interaction requires the phosphorylation of the two serine residues in the substrates' destruction motif D-S-G-X(2,3,4)-S. Interacts with TRIM21.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Beta TRCP2 is a member of the F-box protein family which is characterized by an approximately 40 amino acid motif, the F-box. The F-box proteins constitute one of the four subunits of ubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination. The F-box proteins are divided into 3 classes: Fbws containing WD-40 domains, Fbls containing leucine-rich repeats, and Fbxs containing either different protein-protein interaction modules or no recognizable motifs. The protein encoded by this gene belongs to the Fbws class and, in addition to an F-box, contains multiple WD40 repeats. This gene contains at least 14 exons, and its alternative splicing generates 3 transcript variants diverging at the presence/absence of two alternate exons.

Additional Information

Gene ID	23291
Other Names	F-box/WD repeat-containing protein 11, F-box and WD repeats protein beta-TrCP2, F-box/WD repeat-containing protein 1B, Homologous to Slimb

protein, HOS, FBXW11, BTRCP2, FBW1B, FBXW1B, KIAA0696

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200,ELISA=1:5000-10000

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.

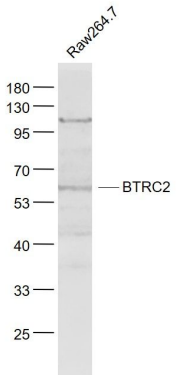
Protein Information

Name FBXW11 {ECO:0000303|PubMed:26837067, ECO:0000312|HGNC:HGNC:13607}

Function Substrate recognition component of a SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:10437795, PubMed:10648623, PubMed:11158290, PubMed:19966869, PubMed:20347421, PubMed:22017875, PubMed:22017876, PubMed:36608670). Probably recognizes and binds to phosphorylated target proteins: the interaction with substrates requires the phosphorylation of the two serine residues in the substrates' destruction motif D-S-G-X(2,3,4)-S (PubMed:10437795, PubMed:10648623, PubMed:19966869, PubMed:20347421, PubMed:22017875, PubMed:22017876, PubMed:36608670). SCF(FBXW11) mediates the ubiquitination of phosphorylated CTNNB1 and participates in Wnt signaling regulation (PubMed:10321728). SCF(FBXW11) plays a key role in NF-kappa-B activation by mediating ubiquitination of phosphorylated NFKBIA, leading to its degradation by the proteasome, thereby allowing the associated NF-kappa-B complex to translocate into the nucleus and to activate transcription (PubMed:10321728, PubMed:10437795, PubMed:10644755, PubMed:20347421). The SCF(FBXW11) complex also regulates NF-kappa-B by mediating ubiquitination of phosphorylated NFKB1: specifically ubiquitinates the p105 form of NFKB1, leading to its degradation (PubMed:11158290). SCF(FBXW11) mediates the ubiquitination of IFNAR1 (PubMed:14532120, PubMed:15337770). SCF(FBXW11) mediates the ubiquitination of CEP68; this is required for centriole separation during mitosis (PubMed:25503564). Involved in the oxidative stress-induced a ubiquitin-mediated decrease in RCAN1 (PubMed:18575781). Mediates the degradation of CDC25A induced by ionizing radiation in cells progressing through S phase and thus may function in the intra-S-phase checkpoint (PubMed:14603323). Has an essential role in the control of the clock-dependent transcription via degradation of phosphorylated PER1 and phosphorylated PER2 (PubMed:15917222). SCF(FBXW11) mediates the ubiquitination of CYTH1, and probably CYTH2 (PubMed:29420262). SCF(FBXW11) acts as a regulator of mTORC1 signaling pathway by catalyzing ubiquitination and subsequent proteasomal degradation of phosphorylated DEPTOR, TFE3 and MITF (PubMed:22017875, PubMed:22017876, PubMed:36608670).

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:Q5SRY7}. Nucleus {ECO:0000250|UniProtKB:Q5SRY7}

Images



Sample:
Raw264.7(Mouse) Cell Lysate at 30 ug
Primary: Anti- BTRC2 (AP58987) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 62 kD
Observed band size: 62 kD