

BTRC2 Rabbit pAb

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Catalog # AP58987

Product Information

Application	WB
Primary Accession	Q9UKB1
Reactivity	Mouse
Predicted	Human, Rat, Chicken, Pig, Horse, Zebrafish
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 {ECO:0000303 | PubMed:26837067, ECO:0000312 | HGNC:HGNC:13607}

Dilution

WB=1:500-2000

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

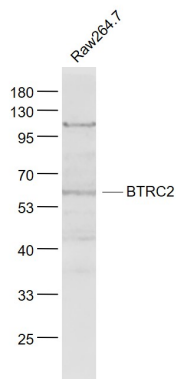
Cytoplasm {ECO:0000250 | UniProtKB:Q5SRY7}. Nucleus {ECO:0000250 | UniProtKB:Q5SRY7}

Background

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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

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