

BTRC Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20478a

Specification

BTRC Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O9Y297
Other Accession	Q3ULA2
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	127-156

BTRC Antibody (N-term) - Additional Information

Gene ID 8945

Other Names

F-box/WD repeat-containing protein 1A, E3RSIkappaB, Epididymis tissue protein Li 2a, F-box and WD repeats protein beta-TrCP, plkappaBalph-E3 receptor subunit, BTRC, BTRCP, FBW1A, FBXW1A

Target/Specificity

This BTRC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 127-156 amino acids from the N-terminal region of human BTRC.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

BTRC Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

BTRC Antibody (N-term) - Protein Information

Name BTRC

Synonyms BTRCP, FBW1A, FBXW1A

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:[10066435](#), PubMed:[10497169](#), PubMed:[10644755](#), PubMed:[10835356](#), PubMed:[11158290](#), PubMed:[11238952](#), PubMed:[11359933](#), PubMed:[11994270](#), PubMed:[12791267](#), PubMed:[12902344](#), PubMed:[14603323](#), PubMed:[14681206](#), PubMed:[14988407](#), PubMed:[15448698](#), PubMed:[15917222](#), PubMed:[16371461](#), PubMed:[22017875](#), PubMed:[22017876](#), PubMed:[22017877](#), PubMed:[22087322](#), PubMed:[25503564](#), PubMed:[25704143](#), PubMed:[36608670](#), PubMed:[9859996](#), PubMed:[9990852](#)). Recognizes and binds to phosphorylated target proteins (PubMed:[10066435](#), PubMed:[10497169](#), PubMed:[10644755](#), PubMed:[10835356](#), PubMed:[11158290](#), PubMed:[11238952](#), PubMed:[11359933](#), PubMed:[11994270](#), PubMed:[12791267](#), PubMed:[12902344](#), PubMed:[14603323](#), PubMed:[14681206](#), PubMed:[14988407](#), PubMed:[15448698](#), PubMed:[15917222](#), PubMed:[16371461](#), PubMed:[22017875](#), PubMed:[22017876](#), PubMed:[22017877](#), PubMed:[22087322](#), PubMed:[25503564](#), PubMed:[25704143](#), PubMed:[36608670](#), PubMed:[9859996](#), PubMed:[9990852](#)). SCF(BTRC) mediates the ubiquitination of CTNNB1 and participates in Wnt signaling (PubMed:[12077367](#), PubMed:[12820959](#)). SCF(BTRC) mediates the ubiquitination of phosphorylated NFKB1, ATF4, CDC25A, DLG1, FBXO5, PER1, SMAD3, SMAD4, SNAI1 and probably NFKB2 (PubMed:[10835356](#), PubMed:[11238952](#), PubMed:[14603323](#), PubMed:[14681206](#)). SCF(BTRC) mediates the ubiquitination of NFKBIA, NFKBIB and NFKBIE; the degradation frees the associated NFKB1 to translocate into the nucleus and to activate transcription (PubMed:[10066435](#), PubMed:[10497169](#), PubMed:[10644755](#), PubMed:[9859996](#)). Ubiquitination of NFKBIA occurs at 'Lys-21' and 'Lys-22' (PubMed:[10066435](#)). 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:[10835356](#), PubMed:[11158290](#), PubMed:[14673179](#)). SCF(BTRC) mediates the ubiquitination of CEP68; this is required for centriole separation during mitosis (PubMed:[25503564](#), PubMed:[25704143](#)). SCF(BTRC) mediates the ubiquitination and subsequent degradation of nuclear NFE2L1 (By similarity). Has an essential role in the control of the clock-dependent transcription via degradation of phosphorylated PER1 and PER2 (PubMed:[15917222](#)). May be involved in ubiquitination and subsequent proteasomal degradation through a DBB1-CUL4 E3 ubiquitin-protein ligase. Required for activation of NFKB-mediated transcription by IL1B, MAP3K14, MAP3K1, IKKBK and TNF. Required for proteolytic processing of GLI3 (PubMed:[16371461](#)). Mediates ubiquitination of REST, thereby leading to its proteasomal degradation (PubMed:[18354482](#), PubMed:[21258371](#)). SCF(BTRC) mediates the ubiquitination and subsequent proteasomal degradation of KLF4; thereby negatively regulating cell pluripotency maintenance and embryogenesis (By similarity). SCF(BTRC) 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:[22017877](#), PubMed:[33110214](#), PubMed:[36608670](#)). SCF(BTRC) directs 'Lys-48'-linked ubiquitination of UBR2 in the T-cell receptor signaling pathway (PubMed:[38225265](#)).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q3ULA2}. Nucleus {ECO:0000250|UniProtKB:Q3ULA2}

Tissue Location

Expressed in epididymis (at protein level).

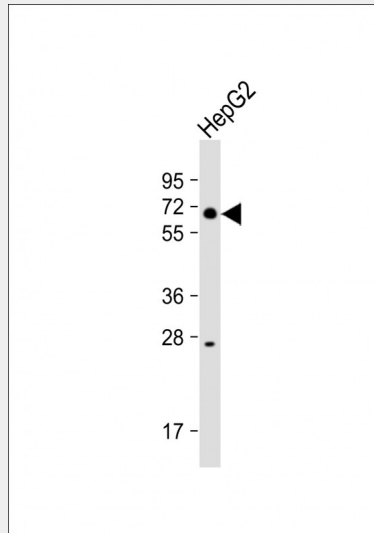
BTRC Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BTRC Antibody (N-term) - Images



Anti-BTRC Antibody (N-term) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 69 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

BTRC Antibody (N-term) - Background

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. Recognizes and binds to phosphorylated target proteins. SCF(BTRC) mediates the ubiquitination of CTNNB1 and participates in Wnt signaling. SCF(BTRC) mediates the ubiquitination of NFKBIA, NFKBIB and NFKBIE; the degradation frees the associated NFKB1 to translocate into the nucleus and to activate transcription. Ubiquitination of NFKBIA occurs at 'Lys-21' and 'Lys-22'. SCF(BTRC) mediates the ubiquitination of phosphorylated NFKB1/nuclear factor NF-kappa-B p105 subunit, ATF4, SMAD3, SMAD4, CDC25A, DLG1, FBXO5 and probably NFKB2. SCF(BTRC) mediates the ubiquitination of phosphorylated SNAI1. May be involved in ubiquitination and subsequent proteasomal degradation through a DBB1-CUL4 E3 ubiquitin-protein ligase. Required for activation of NFKB-mediated transcription by IL1B, MAP3K14, MAP3K1, IKKKB and TNF. Required for proteolytic processing of GLI3.

BTRC Antibody (N-term) - References

- Busino L., et al. Nature 426:87-91(2003).
Wan M., et al. J. Biol. Chem. 279:14484-14487(2004).
Zhou B.P., et al. Nat. Cell Biol. 6:931-940(2004).
Yaron A., et al. Nature 396:590-594(1998).
Margottin F., et al. Mol. Cell 1:565-574(1998).