

BTRC Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP11871a**Specification**

BTRC Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [Q9Y297](#)**BTRC Antibody (N-term) Blocking peptide - 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

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.

BTRC Antibody (N-term) Blocking peptide - 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](http://www.uniprot.org/citations/10066435))target=" _blank">10066435, PubMed: [10497169](http://www.uniprot.org/citations/10497169) target=" _blank">10497169, PubMed: [9990852](http://www.uniprot.org/citations/9990852) target=" _blank">9990852, PubMed: [10644755](http://www.uniprot.org/citations/10644755) target=" _blank">10644755, PubMed: [10835356](http://www.uniprot.org/citations/10835356) target=" _blank">10835356, PubMed: [11238952](http://www.uniprot.org/citations/11238952) target=" _blank">11238952, PubMed: [11359933](http://www.uniprot.org/citations/11359933) target=" _blank">11359933, PubMed: [11158290](http://www.uniprot.org/citations/11158290) target=" _blank">11158290, PubMed: [11994270](http://www.uniprot.org/citations/11994270) target=" _blank">11994270, PubMed: [12791267](http://www.uniprot.org/citations/12791267) target=" _blank">12791267, PubMed: [12902344](http://www.uniprot.org/citations/12902344) target=" _blank">12902344, PubMed: [14603323](http://www.uniprot.org/citations/14603323) target=" _blank">14603323, PubMed: [14681206](http://www.uniprot.org/citations/14681206)

target="_blank">14681206, PubMed:14988407, PubMed:15448698, PubMed:15917222, PubMed:16371461, PubMed:25503564, PubMed:25704143, PubMed:9859996, PubMed:22017875, PubMed:22017876, PubMed:22017877, PubMed:22087322, PubMed:36608670). Recognizes and binds to phosphorylated target proteins (PubMed:10066435, PubMed:10497169, PubMed:9990852, PubMed:10644755, PubMed:10835356, PubMed:11238952, PubMed:11359933, PubMed:11158290, PubMed:11994270, PubMed:12791267, PubMed:12902344, PubMed:14603323, PubMed:14681206, PubMed:14988407, PubMed:15448698, PubMed:15917222, PubMed:16371461, PubMed:25503564, PubMed:25704143, PubMed:9859996, PubMed:22017875, PubMed:22017876, PubMed:22017877, PubMed:22087322, PubMed:36608670). 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:14681206, PubMed:14603323). 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:9859996, PubMed:10066435, PubMed:10497169, PubMed:10644755). 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:<a

[10835356](http://www.uniprot.org/citations/10835356), PubMed: [11158290](http://www.uniprot.org/citations/11158290), PubMed: [14673179](http://www.uniprot.org/citations/14673179)). SCF(BTRC) mediates the ubiquitination of CEP68; this is required for centriole separation during mitosis (PubMed: [25704143](http://www.uniprot.org/citations/25704143), PubMed: [25503564](http://www.uniprot.org/citations/25503564)). 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](http://www.uniprot.org/citations/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, IKKB and TNF. Required for proteolytic processing of GLI3 (PubMed: [16371461](http://www.uniprot.org/citations/16371461)). Mediates ubiquitination of REST, thereby leading to its proteasomal degradation (PubMed: [21258371](http://www.uniprot.org/citations/21258371), PubMed: [18354482](http://www.uniprot.org/citations/18354482)). 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](http://www.uniprot.org/citations/22017875), PubMed: [22017876](http://www.uniprot.org/citations/22017876), PubMed: [22017877](http://www.uniprot.org/citations/22017877), PubMed: [33110214](http://www.uniprot.org/citations/33110214), PubMed: [36608670](http://www.uniprot.org/citations/36608670)).

Cellular Location

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

Tissue Location

Expressed in epididymis (at protein level).

BTRC Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

BTRC Antibody (N-term) Blocking peptide - Images

BTRC Antibody (N-term) Blocking peptide - Background

This gene encodes 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 nonrecognizable motifs. The protein encoded by this gene belongs to the Fbws class; in addition to an F-box, this protein contains multiple WD-40 repeats. This protein is homologous to Xenopus bTrCP1, yeast Met30, Neurospora Scon2 and Drosophila Slimb proteins. It interacts with HIV-1 Vpu and connects CD4 to the proteolytic machinery. It also associates specifically with phosphorylated I κ B α and beta-catenin destruction motifs, probably functioning in multiple transcriptional programs by activating the NF- κ B pathway and inhibiting the beta-catenin pathway.

BTRC Antibody (N-term) Blocking peptide - References

Popov, N., et al. Nat. Cell Biol. 12(10):973-981(2010)Inuzuka, H., et al. Cancer Cell
18(2):147-159(2010)Guderian, G., et al. J. Cell. Sci. 123 (PT 13), 2163-2169 (2010) :Rose, J.E., et al.
Mol. Med. 16 (7-8), 247-253 (2010) :Tsai, W.B., et al. PLoS ONE 5 (7), E11171 (2010) :