

Rabbit BTRC Polyclonal Antibody | anti-BTRC antibody

BTRC Antibody

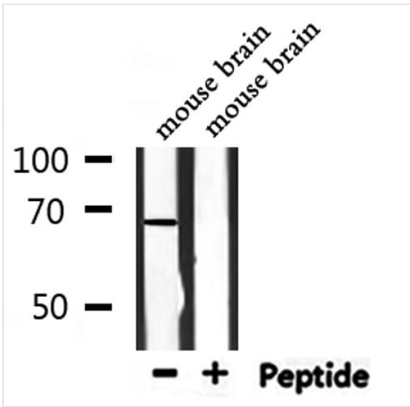
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326300	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

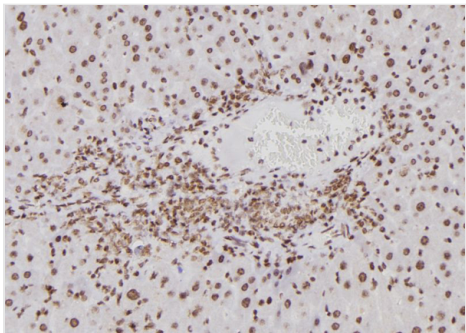
BTRC; Polyclonal Antibody; BTRC Antibody; Beta transducin repeat containing E3 ubiquitin protein ligase; beta TrCP1; beta-transducin repeat containing; BETA-TRCP; betaTrCP; btrC; bTrCP; bTrCP1; E3RSIkappaB; F box and WD repeat protein 1B; F box and WD repeats protein beta TrCP; F-box and WD repeats protein beta-TrCP; F-box/WD repeat protein 1A; F-box/WD repeat-containing protein 1A; FBW1A; FBW1A_HUMAN; FBXW1; FBXW1A; FWD1; HOS; mKIAA4123; plkappaBalpha-E3 receptor subunit; Slimb; anti-BTRC antibody

PRODUCT SPECIFICATIONS

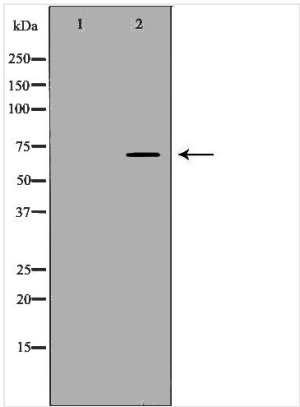
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	BTRC antibody detects endogenous levels of total BTRC
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	569
Applicable Applications for anti-BTRC antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human BTRC
Subcellular Location	Cytoplasm. Nucleus.
Tissue Specificity	Expressed in epididymis (at protein level).
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (80%), Rabbit (100%), Dog (100%), Chicken (92%), Xenopus (83%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)
Western blot analysis of extracts from mouse brain, using BTRC Antibody.



IHC (Immunohistochemistry)
AAA326300 at 1/100 staining Mouse liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of extracts of Kidney, using BTRC antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-BTRC antibody	Description: Beta-transducin repeat-containing protein (beta-TrCP or FBW1A) is an F-box family protein characterized by the presence of the protein-protein mediating F-box domain first described in cyclin F. F-box proteins act as substrate adaptors that target proteins containing a specific phosphorylated sequence element, referred to as a phosphodegron, to the SCF E3 ubiquitin ligase complex for ubiquitination (1, 2). beta-TrCP targets many important proteins with diverse functions, such as p53, H-Ras, Smad4, IkappaBalpha, beta-catenin, and the cell cycle checkpoint protein claspin, for ubiquitin-mediated degradation (3-5). Research studies have shown that inhibition of beta-TrCP expression has a demonstrated benefit in the treatment of prostate cancer (6). 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. Recognizes and binds to phosphorylated target proteins (PubMed:10066435, PubMed:10497169, PubMed:10644755, PubMed:10835356, PubMed:11238952, PubMed:11359933, PubMed:11994270, PubMed:12791267, PubMed:12902344, PubMed:14603323, PubMed:14681206, PubMed:14988407, PubMed:15448698, PubMed:15917222, PubMed:16371461, PubMed:25503564, PubMed:25704143, PubMed:9859996). 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:10066435, PubMed:10497169, PubMed:10644755). Ubiquitination of NFKBIA occurs at 'Lys-21' and 'Lys-22' (PubMed:10066435). SCF(BTRC) mediates the ubiquitination of CEP68; this is required for centriole separation during mitosis (PubMed:25704143, PubMed: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). 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). Subunit Structure: Homodimer. Self-associates. Component of the SCF(BTRC) complex formed of CUL1, SKP1, RBX1 and a BTRC dimer. Direct interaction with SKP1 occurs via the F-box domain. Interacts with phosphorylated ubiquitination substrates SMAD3 and SMAD4. Interacts with phosphorylated ubiquitination substrates CTNNB1, NFKBIA, NFKBIB, NFKBIE, NFKB1/nuclear factor NF-kappa-B p105 subunit, ATF4, CDC25A, DLG1, FBXO5 and SNAI1; the interaction requires the phosphorylation of the 2 serine residues in the substrate destruction motif D-S-G-X(2, 3, 4)-S. Binds UBQLN1. Interacts with CDC34 and UBE2R2. Interacts with FBXW11. Interacts with CUL4A and DDB1. Part of a SCF(BTRC)-like complex lacking CUL1, which is associated with phosphorylated NKBIA and RELA; RELA interacts directly with NFKBIA. Interacts with the phosphorylated form of GLI3. Interacts with CLU. Interacts with PER1 (phosphorylated), PER2 (phosphorylated) and PER3. Interacts with phosphorylated ubiquitination substrate CEP68 (PubMed:25704143, PubMed:25503564). Interacts with ZC3H12A; this interaction occurs when ZC3H12A is phosphorylated in a IKKBK/IKKB-dependent manner (By similarity). Interacts with HSF1; this interaction occurs during mitosis and induces HSF1 ubiquitin-dependent degradation, a process inhibited by CDC20 (PubMed:18794143). Interacts with NFE2L1 (By similarity). Interacts with INAVA (PubMed:29420262). Similarity: The N-terminal D domain mediates homodimerization.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4502477
NCBI GeneID	8945
NCBI Accession #	NP_003930.1
NCBI GenBank Nucleotide #	NM_003939.4
UniProt Accession #	Q9Y297; Q5W141; Q5W142; Q9Y213; B5MD49
Molecular Weight	Observed: 69 kDa Predicted: 69 kDa
NCBI Official Full Name	F-box/WD repeat-containing protein 1A isoform 2
NCBI Official Synonym Full Names	beta-transducin repeat containing E3 ubiquitin protein ligase
NCBI Official Symbol	BTRC
NCBI Official Synonym Symbols	FWD1; FBW1A; FBXW1; bTrCP; FBXW1A; bTrCP1; betaTrCP; BETA-TRCP

NCBI Protein Information	F-box/WD repeat-containing protein 1A
UniProt Protein Name	F-box/WD repeat-containing protein 1A
UniProt Gene Name	BTRC
UniProt Synonym Gene Names	BTRCP; FBW1A; FBXW1A

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/btrc-antibody-immunohistochemistry-western-blot-elisa/326300>