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Btrc antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI11982

Product Information

Application	WB
Primary Accession	Q3ULA2
Other Accession	NM_001037758, NP_001032847
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Predicted	Rat, Rabbit, Pig, Chicken, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	68923

Additional Information

Gene ID	12234
Alias Symbol	Beta-Trcp1, FWD1, Fbw1a, KIAA4123, Slimb, b-TrCP, beta-TrCP, mKIAA4123, HOS
Other Names	F-box/WD repeat-containing protein 1A, pIkappaB-E3 receptor subunit, Btrc {ECO:0000312|MGI:MGI:1338871}
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Btrc antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Btrc antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

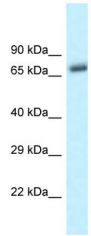
Name	Btrc {ECO:0000312|MGI:MGI:1338871}
Function	Substrate recognition component of a SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:10097128, PubMed:16371461, PubMed:16611981, PubMed:18782782, PubMed:21911472, PubMed:29593216, PubMed:9859996, PubMed:9990853). Recognizes and binds to phosphorylated target proteins (PubMed:10097128, PubMed:16371461, PubMed:16611981, PubMed:18782782, PubMed:21911472, PubMed:9859996, PubMed:9990853). SCF(BTRC) mediates the ubiquitination of phosphorylated NFKB, ATF4, CDC25A, DLG1, FBXO5,

PER1, SMAD3, SMAD4, SNAI1 and probably NFKB2. SCF(BTRC) mediates the ubiquitination of CTNNB1 and participates in Wnt signaling (By similarity). 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:10097128, PubMed:9859996). Ubiquitination of NFKBIA occurs at 'Lys-21' and 'Lys- 22' (PubMed:10097128, PubMed:9859996). 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 (By similarity). SCF(BTRC) mediates the ubiquitination of CEP68; this is required for centriole separation during mitosis (By similarity). SCF(BTRC) mediates the ubiquitination and subsequent degradation of nuclear NFE2L1 (PubMed:21911472). Has an essential role in the control of the clock-dependent transcription via degradation of phosphorylated PER1 and PER2 (PubMed:18782782). May be involved in ubiquitination and subsequent proteasomal degradation through a DBB1- CUL4 E3 ubiquitin-protein ligase (By similarity). Required for activation of NFKB-mediated transcription by IL1B, MAP3K14, MAP3K1, IKBKB and TNF (By similarity). SCF(BTRC) acts as a negative regulator of smoothened signaling by mediating ubiquitination of GLI2 and GLI3 in absence of smoothened, promoting their processing into transcription repressors (PubMed:16371461, PubMed:16611981). Mediates ubiquitination of REST, thereby leading to its proteasomal degradation (By similarity). SCF(BTRC) mediates the ubiquitination and subsequent proteasomal degradation of KLF4; thereby negatively regulating cell pluripotency maintenance and embryogenesis (PubMed:29593216). SCF(BTRC) acts as a regulator of mTORC1 signaling pathway by catalyzing ubiquitination and subsequent proteasomal degradation of phosphorylated DEPTOR, TFE3 and MITF (By similarity). SCF(BTRC) directs 'Lys-48'- linked ubiquitination of UBR2 in the T-cell receptor signaling pathway (By similarity).

Cellular Location Cytoplasm. Nucleus

Tissue Location Expressed in heart, brain, liver, skeletal muscle and, most strongly, in testis.

Images



WB Suggested Anti-Btrc Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Pancreas

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