

# 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:18782782, PubMed:21911472,

PubMed: <u>29593216</u>, PubMed: <u>9859996</u>, PubMed: <u>9990853</u>). Recognizes and

binds to phosphorylated target proteins (PubMed: 10097128,

PubMed:<u>16371461</u>, PubMed:<u>18782782</u>, PubMed:<u>21911472</u>, PubMed:<u>9859996</u>, PubMed:<u>9990853</u>). 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). Required for proteolytic processing of GLI3 (PubMed: 16371461). 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'.