

Datasheet for ABIN7563730 **BTRC Protein (AA 1-605) (His tag)**



Overview

| Quantity: | 1 mg |
|-------------------------------|---|
| Target: | BTRC |
| Protein Characteristics: | AA 1-605 |
| Origin: | Mouse |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This BTRC protein is labelled with His tag. |

Product Details

| Purpose: | Custom-made recombinant Btrc Protein expressed in mammalian cells. |
|-----------|--|
| Sequence: | MDPAEAVLQE KALKFMCSMP RSLWLGCSSL ADSMPSLRCL YNPGTGALTA FQNSSEREDC |
| | NNGEPPRKII PEKNSLRQTY NSCARLCINQ ETVCLTSTAM KTENCVAKAK LANGTSSMIV |
| | PKQRKLSASY EKEKELCVKY FEQWSESDQV EFVEHLISQM CHYQHGHINS YLKPMLQRDF |
| | ITALPARGLD HIAENILSYL DAKSLCAAEL VCKEWYRVTS DGMLWKKLIE RMVRTDSLWR |
| | GLAERRGWGQ YLFKNKPPDE NAPPNSFYRA LYPKIIQDIE TIESNWRCGR HSLQRIHCRS |
| | ETSKGVYCLQ YDDQKIVSGL RDNTIKIWDK STLECKRILT GHTGSVLCLQ YDERVIITGS |
| | SDSTVRVWDV NAGEMLNTLI HHCEAVLHLR FNNGMMVTCS KDRSIAVWDM ASPTDITLRR |
| | VLVGHRAAVN VVDFDDKYIV SASGDRTIKV WNTSTCEFVR TLNGHKRGIA CLQYRDRLVV |
| | SGSSDNTIRL WDIECGACLR VLEGHEELVR CIRFDNKRIV SGAYDGKIKV WDLMAALDPR |
| | APAGTLCLRT LVEHSGRVFR LQFDEFQIVS SSHDDTILIW DFLNDPAAHA EPPRSPSRTY TYISR |
| | Sequence without tag. The proposed Purification-Tag is based on experiences with the |
| | expression system, a different complexity of the protein could make another tag necessar |

| | In case you have a special request, please contact us. |
|-------------------|--|
| Specificity: | If you are looking for a specific domain and are interested in a partial protein or a different |
| | isoform, please contact us regarding an individual offer. |
| Characteristics: | Key Benefits: |
| | Made to order protein - from design to production - by highly experienced protein experts. Protein expressed in mammalian cells and purified in one-step affinity chromatography The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. State-of-the-art algorithm used for plasmid design (Gene synthesis). |
| | This protein is a made-to-order protein and will be made for the first time for your order. Our |
| | experts in the lab try to ensure that you receive soluble protein. |
| | If you are not interested in a full length protein, please contact us for individual protein fragments. |
| | The big advantage of ordering our made-to-order proteins in comparison to ordering custom |
| | made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified. |
| Purity: | > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC |
| Grade: | custom-made |
| Target Details | |
| Target: | BTRC |
| Alternative Name: | Btrc (BTRC Products) |
| Background: | F-box/WD repeat-containing protein 1A (Beta-TrCP protein E3RS-lkappaB) (Beta-transducin repeat-containing protein) (Beta-TrCP) (E3RSlkappaB) (mE3RS-lkappaB) (F-box and WD repeat protein beta-TrCP) (HOS) (Ubiquitin ligase FWD1) (plkappaB-E3 receptor subunit),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:9990853, PubMed:21911472, PubMed:29593216). Recognizes and binds to phosphorylated target proteins (PubMed:10097128, PubMed:16371461, PubMed:18782782, |

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:9859996, PubMed:10097128). Ubiquitination of NFKBIA occurs at 'Lys-21' and 'Lys-22' (PubMed:9859996, PubMed:10097128). 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). {EC0:0000250|UniProtKB:Q9Y297, ECO:0000269|PubMed:10097128, ECO:0000269|PubMed:16371461, ECO:0000269|PubMed:18782782, ECO:0000269|PubMed:21911472, ECO:0000269|PubMed:29593216, ECO:0000269|PubMed:9859996, ECO:0000269|PubMed:9990853}.

| Molecular Weight: | 68.9 kDa |
|-------------------|---|
| UniProt: | Q3ULA2 |
| Pathways: | Cell Division Cycle, Hedgehog Signaling |

Application Details

| Application Notes: | We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though. |
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| Restrictions: | For Research Use only |

Handling

| Format: | Liquid |
|------------------|--|
| Buffer: | The buffer composition is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |
| Storage: | -80 °C |
| Storage Comment: | Store at -80°C. |
| Expiry Date: | 12 months |