Datasheet for ABIN3125749

# CRBN Protein (AA 1-445) (Strep Tag)

Go to Product page

## Overview

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| Quantity: | 250 µg |
| Target: | CRBN |
| Protein Characteristics: | AA 1-445 |
| Origin: | Mouse |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This CRBN protein is labelled with Strep Tag. |
| Application: | Western Blotting (WB), SDS-PAGE (SDS), ELISA |

## Product Details

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| Brand: | AliCE® |
| Sequence: | MAGEGDQQDA AHNMGNHLPL LPADSEDEDD EIEMEVEDQD SKEARKPNII NFDTSLPTSH TYLGADMEEF HGRTLHDDDS CQVIPVLPEV LMILIPGQTL PLQLSHPQEV SMVRNLIQKD RTFAVLAYSN VQEREAQFGT TAEIYAYREE QEFGIEVVKV KAIGRQRFKV LELRTQSDGI QQAKVQILPE CVLPSTMSAV QLESLNKCQV FPSKPISWED QYSCKWWQKY QKRKFHCANL TSWPRWLYSL YDAETLMDRI KKQLREWDEN LKDDSLPENP IDFSYRVAAC LPIDDVLRIQ LLKIGSAIQR LRCELDIMNK CTSLCCKQCQ ETEITTKNEI FSLSLCGPMA AYVNPHGYVH ETLTVYKASN LNLIGRPSTV HSWFPGYAWT IAQCKICASH IGWKFTATKK DMSPQKFWGL TRSALLPTIP ETEDEISPDK VILCL<br>**Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.** |

## Product Details

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| Characteristics: | Key Benefits:<br>• Made in Germany - from design to production - by highly experienced protein experts.<br>• Protein expressed with ALiCE® and purified in one-step affinity chromatography<br>• These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).<br>• State-of-the-art algorithm used for plasmid design (Gene synthesis).<br><br>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.<br>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.<br><br>Expression System:<br>• ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.<br>• During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!<br><br>Concentration:<br>• The concentration of our recombinant proteins is measured using the absorbance at 280nm.<br>• The protein's absorbance will be measured against its specific reference buffer.<br>• We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein. |
| Purification: | One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®). |
| Purity: | > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC). |
| Grade: | custom-made |

## Target Details

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| Target: | CRBN |
| Alternative Name: | Crbn (CRBN Products) |
| Background: | Protein cereblon (Protein PiL),FUNCTION: Substrate recognition component of a DCX (DDB1-CUL4-X-box) E3 protein ligase complex that mediates the ubiquitination and subsequent proteasomal degradation of target proteins, such as MEIS2 or ILF2. Normal degradation of key regulatory proteins is required for normal limb outgrowth and expression of the fibroblast growth factor FGF8 (By similarity). Maintains presynaptic glutamate release and consequently, cognitive functions such as memory and learning, by negatively regulating large-conductance calcium-activated potassium (BK) channels in excitatory neurons (PubMed:29530986). Likely to function by regulating the assembly and neuronal surface expression of BK channels via its interaction with KCNT1 (By similarity). May also be involved in regulating anxiety-like behaviors via a BK channel-independent mechanism (PubMed:29530986). Plays a negative role in TLR4 signaling by interacting with TRAF6 and ECSIT, leading to inhibition of ECSIT ubiquitination, an important step of the signaling (By similarity). {ECO:0000250\|UniProtKB:Q96SW2, ECO:0000269\|PubMed:29530986, ECO:0000305}. |
| Molecular Weight: | 50.9 kDa |
| UniProt: | Q8C7D2 |

## Application Details

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| Application Notes: | In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though. |
| Comment: | ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.<br>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein! |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Buffer: | The buffer composition is at the discretion of the manufacturer.<br>Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.** |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |
| Storage: | -80 °C |
| Storage Comment: | Store at -80°C. |
| Expiry Date: | 12 months |