Datasheet for ABIN3133337

# CBL Protein (AA 1-913) (Strep Tag)

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## Overview

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| Quantity: | 1 mg |
| Target: | CBL |
| Protein Characteristics: | AA 1-913 |
| Origin: | Mouse |
| Source: | Tobacco (Nicotiana tabacum) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This CBL protein is labelled with Strep Tag. |
| Application: | Western Blotting (WB), SDS-PAGE (SDS), ELISA |

## Product Details

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| Sequence: | MAGNVKKSSG AGGGGSGGSG AGGLIGLMKD AFQPHHHHHH LSPHPPCTVD KKMVEKCWKL MDKVVRLCQN PKLALKNSPP YILDLLPDTY QHLRTVLSRY EGKMETLGEN EYFRVFMENL MKKTKQTISL FKEGKERMYE ENSQPRRNLT KLSLIFSHML AELKGIFPSG LFQGDTFRIT KADAAEFWRK AFGEKTIVPW KSFRQALHEV HPISSGLEAM ALKSTIDLTC NDYISVFEFD IFTRLFQPWS SLLRNWNSLA VTHPGYMAFL TYDEVKARLQ KFIHKPGSYI FRLSCTRLGQ WAIGYVTADG NILQTIPHNK PLFQALIDGF REGFYLFPDG RNQNPDLTGL CEPTPQDHIK VTQEQYELYC EMGSTFQLCK ICAENDKDVK IEPCGHLMCT SCLTSWQESE GQGCPFCRCE IKGTEPIVVD PFDPRGSGSL LRQGAEGAPS PNYDDDDDER ADDSLFMMKE LAGAKVERPS SPFSMAPQAS LPPVPPRLDL LQQRAPVPAS TSVLGTASKA ASGSLHKDKP LPIPPTLRDL PPPPPPDRPY SVGAETRPQR RPLPCTPGDC PSRDKLPPVP SSRPGDSWLS RPIPKVPVAT PNPGDPWNGR ELTNRHSLPF SLPSQMEPRA DVPRLGSTFS LDTSMTMNSS PVAGPESEHP KIKPSSSANA IYSLAARPLP MPKLPPGEQG ESEEDTEYMT PTSRPVGVQK PEPKRPLEAT |

 

QSSRACDCDQ QIDSCTYEAM YNIQSQALSV AENSASGEGN LATAHTSTGP EESENEDDGY DVPKPPVPAV LARRTLSDIS NASSSFGWLS LDGDPTNFNE GSQVPERPPK PFPRRINSER KASSYQQGGG ATANPVATAP SPQLSSEIER LMSQGYSYQD IQKALVIAHN NIEMAKNILR EFVSISSPAH VAT

**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.**

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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 will ensure that you receive a correctly folded protein.

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.

Expression System:

- 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.
- 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!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

 

## Product Details

- We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

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| Purification: | Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):<br>1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.<br>2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot. |
| Purity: | ≥ 80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot. |
| Endotoxin Level: | Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg) |

## Target Details

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| Target: | CBL |
| Alternative Name: | Cbl (CBL Products) |
| Background: | E3 ubiquitin-protein ligase CBL (EC 2.3.2.27) (Casitas B-lineage lymphoma proto-oncogene) (Proto-oncogene c-Cbl) (RING-type E3 ubiquitin transferase CBL) (Signal transduction protein CBL),FUNCTION: Adapter protein that functions as a negative regulator of many signaling pathways that are triggered by activation of cell surface receptors. Acts as an E3 ubiquitin-protein ligase, which accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, and then transfers it to substrates promoting their degradation by the proteasome. Ubiquitinates SPRY2 (By similarity). Ubiquitinates EGFR (By similarity). Recognizes activated receptor tyrosine kinases, including KIT, FLT1, FGFR1, FGFR2, PDGFRA, PDGFRB, EGFR, CSF1R, EPHA8 and KDR and terminates signaling. Recognizes membrane-bound HCK, SRC and other kinases of the SRC family and mediates their ubiquitination and degradation. Participates in signal transduction in hematopoietic cells. Plays an important role in the regulation of osteoblast differentiation and apoptosis. Essential for osteoclastic bone resorption. The 'Tyr-737' phosphorylated form induces the activation and recruitment of phosphatidylinositol 3-kinase to the cell membrane in a signaling pathway that is critical for osteoclast function. May be functionally coupled with the E2 ubiquitin-protein ligase UB2D3 (PubMed:10393178, PubMed:12649282, PubMed:19265199, PubMed:20100865, PubMed:9653117). In association with CBLB, required for proper feedback inhibition of ciliary platelet-derived growth factor receptor-alpha (PDGFRA) signaling pathway via ubiquitination and internalization of PDGFRA (PubMed:29237719). {ECO:0000250\|UniProtKB:P22681, ECO:0000269\|PubMed:10393178, |

## Target Details

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| | ECO:0000269\|PubMed:12649282, ECO:0000269\|PubMed:19265199, ECO:0000269\|PubMed:20100865, ECO:0000269\|PubMed:29237719, ECO:0000269\|PubMed:9653117}. |
| Molecular Weight: | 100.6 kDa |
| UniProt: | P22682 |
| Pathways: | TCR Signaling, Interferon-gamma Pathway, EGFR Signaling Pathway, EGFR Downregulation, VEGFR1 Specific Signals |

## 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. If you have a special request, please contact us. |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |
| Storage: | -80 °C |
| Storage Comment: | Store at -80°C. |

## Handling

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| Expiry Date: | Unlimited (if stored properly) |

 