

Datasheet for ABIN3090503

Cbl Proto-Oncogene B, E3 Ubiquitin Protein Ligase (CBLB) (AA 1-982) protein (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	Cbl Proto-Oncogene B, E3 Ubiquitin Protein Ligase (CBLB)
Protein Characteristics:	AA 1-982
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	Strep Tag
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	<p>MANSMNGRNP GGRGGNPRKG RILGIIDAIQ DAVGPPKQAA ADRRTVEKTW KLMDKVVRLC</p> <p>QNPQLQLKNS PPYILDILPD TYQHLRLILS KYDDNQKLAQ LSENEYFKIY IDSLMKKSKR</p> <p>AIRLFKEGKE RMYEEQSQDR RNLTKLSLIF SHMLAEIKAI FPNGQFQGDN FRITKADAAE</p> <p>FWRKFFGDKT IVPWKVFRQC LHEVHQISSG LEAMALKSTI DLTCNDYISV FEFDIFTRLF</p> <p>QPWGSILRNW NFLAVTHPGY MAFLTYDEVK ARLQKYSTKP GSYIFRLSCT RLGQWAIGYV</p> <p>TGDGNILQTI PHNKLPLFQAL IDGSREGFYL YPDGRSYNPD LTGLCEPTH DHIKVTQEYQ</p> <p>ELYCEMGSTF QLCKICAEND KDVKIEPCGH LMCTSCLTAW QESDGQGCPF CRCEIKGTEP</p> <p>IIVDPFDPRD EGSRCCSIID PFGMPMLDLD DDDREESLM MNRLANVRKC TDRQNSPVTS</p> <p>PGSSPLAQRK KPQPDPLQIP HLSLPPVPPR LDLIQKGIVR SPCGSPTGSP KSSPCMVRKQ</p> <p>DKPLPAPPPP LRDP PPPPPE RPPPIPPDNR LSRHHHVES VPSRDPPMPL EAWCPRDVF</p> <p>TNQLVGCRLG GEGSPKPGIT ASSNVNGRHS RVGSDPVLMR KHRRHDLPLE GAKVFSNGHL</p> <p>GSEEYDVPPR LSPPPPVTTL LPSIKCTGPL ANSLSEKTRD PVEEDDDEYK IPSSHPVSLN</p>
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SQPSHCHNVK PPVRSCDNGH CMLNGTHGPS SEKKSNIPLD SIYLGKGDVFD SASDPVPLPP
ARPPTRDNPK HGSSLNRTPS DYDLLIPPLG EDAFDALPPS LPPPPPPARH SLIEHSKPPG
SSSRPSSGQD LFLPSDPFV DLASGQVPLP PARRLPGENV KTNRTSQDYD QLPSCSDGSQ
APARPPKPRP RRTAPEIHHR KPHGPEAALE NVDAKIAKLM GEGYAFEEVK RALEIAQNNV
EVARSILREF AFPPPVSPRL NL

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

Product Details

specific reference buffer.

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

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 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. 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)
Grade:	Crystallography grade

Target Details

Target:	Cbl Proto-Oncogene B, E3 Ubiquitin Protein Ligase (CBLB)
Alternative Name:	CBLB (CBLB Products)
Background:	E3 ubiquitin-protein ligase CBL-B (EC 2.3.2.27) (Casitas B-lineage lymphoma proto-oncogene b) (RING finger protein 56) (RING-type E3 ubiquitin transferase CBL-B) (SH3-binding protein CBL-B) (Signal transduction protein CBL-B),FUNCTION: E3 ubiquitin-protein ligase which accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, and transfers it to substrates, generally promoting their degradation by the proteasome. Negatively regulates TCR (T-cell receptor), BCR (B-cell receptor) and FCER1 (high affinity immunoglobulin epsilon receptor) signal transduction pathways. In naive T-cells, inhibits VAV1 activation upon TCR engagement and imposes a requirement for CD28 costimulation for proliferation and IL-2 production. Also acts by promoting PIK3R1/p85 ubiquitination, which impairs its recruitment to the TCR and subsequent activation. In activated T-cells, inhibits PLCG1 activation and calcium mobilization upon restimulation and promotes anergy. In B-cells, acts by ubiquitinating SYK and promoting its proteasomal degradation. Slightly promotes SRC ubiquitination. May be involved in EGFR ubiquitination and internalization. May be functionally coupled with the E2 ubiquitin-protein ligase UB2D3. In association with CBL, required for proper feedback inhibition of ciliary platelet-derived growth factor receptor-alpha (PDGFRA) signaling pathway via ubiquitination and internalization of PDGFRA (By similarity). {ECO:0000250 UniProtKB:Q3TTA7,

Target Details

ECO:0000269|PubMed:10022120, ECO:0000269|PubMed:10086340,
ECO:0000269|PubMed:11087752, ECO:0000269|PubMed:11526404,
ECO:0000269|PubMed:14661060, ECO:0000269|PubMed:20525694}.

Molecular Weight: 109.5 kDa

UniProt: [Q13191](#)

Application Details

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.

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

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.

Expiry Date: Unlimited (if stored properly)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process