Datasheet for ABIN3088327

ABL2 Protein (ABL2) (AA 2-1182) (His tag)

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1 Image

Overview

Quantity:	1 mg
Target:	ABL2
Protein Characteristics:	AA 2-1182
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ABL2 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence:	GQQVGRVGEA PGLQQPQPRG IRGSSAARPS GRRRDPAGRT TETGFNIFTQ HDHFASCVED GFEGDKTGGS SPEALHRPYG CDVEPQALNE AIRWSSKENL LGATESDPNL FVALYDFVAS GDNTLSITKG EKLRVLGYNQ NGEWSEVRSK NGQGWVPSNY ITPVNSLEKH SWYHGPVSRS AAEYLLSSLI NGSFLVRESE SSPGQLSISL RYEGRVYHYR INTTADGKVY VTAESRFSTL AELVHHHSTV ADGLVTTLHY PAPKCNKPTV YGVSPIHDKW EMERTDITMK HKLGGGQYGE VYVGVWKKYS LTVAVKTLKE DTMEVEEFLK EAAVMKEIKH PNLVQLLGVC TLEPPFYIVT EYMPYGNLLD YLRECNREEV TAVVLLYMAT QISSAMEYLE KKNFIHRDLA ARNCLVGENH VVKVADFGLS RLMTGDTYTA HAGAKFPIKW TAPESLAYNT FSIKSDVWAF GVLLWEIATY GMSPYPGIDL SQVYDLLEKG YRMEQPEGCP PKVYELMRAC WKWSPADRPS FAETHQAFET MFHDSSISEE VAEELGRAAS SSSVVPYLPR LPILPSKTRT LKKQVENKEN IEGAQDATEN SASSLAPGFI RGAQASSGSP ALPRKQRDKS PSSLLEDAKE TCFTRDRKGG FFSSFMKKRN APTPPKRSSS FREMENQPHK KYELTGNFSS VASLQHADGF SFTPAQQEAN LVPPKCYGGS

FAQRNLCNDD GGGGGGSGTA GGGWSGITGF FTPRLIKKTL GLRAGKPTAS DDTSKPFPRS NSTSSMSSGL PEQDRMAMTL PRNCQRSKLQ LERTVSTSSQ PEENVDRAND MLPKKSEESA APSRERPKAK LLPRGATALP LRTPSGDLAI TEKDPPGVGV AGVAAAPKGK EKNGGARLGM AGVPEDGEQP GWPSPAKAAP VLPTTHNHKV PVLISPTLKH TPADVQLIGT DSQGNKFKLL SEHQVTSSGD KDRPRRVKPK CAPPPPPVMR LLQHPSICSD PTEEPTALTA GQSTSETQEG GKKAALGAVP ISGKAGRPVM PPPQVPLPTS SISPAKMANG TAGTKVALRK TKQAAEKISA DKISKEALLE CADLLSSALT EPVPNSQLVD TGHQLLDYCS GYVDCIPQTR NKFAFREAVS KLELSLQELQ VSSAAAGVPG TNPVLNNLLS CVQEISDVVQ R

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human ABL2 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.

Product Details

	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:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	ABL2
Alternative Name:	ABL2 (ABL2 Products)
Background:	Non-receptor tyrosine-protein kinase that plays an ABL1-overlapping role in key processes linked to cell growth and survival such as cytoskeleton remodeling in response to extracellular stimuli, cell motility and adhesion and receptor endocytosis. Coordinates actin remodeling through tyrosine phosphorylation of proteins controlling cytoskeleton dynamics like MYH10 (involved in movement), CTTN (involved in signaling), or TUBA1 and TUBB (microtubule subunits). Binds directly F-actin and regulates actin cytoskeletal structure through its F-actin-bundling activity. Involved in the regulation of cell adhesion and motility through phosphorylation of key regulators of these processes such as CRK, CRKL, DOK1 or ARHGAP35. Adhesion-dependent phosphorylation of ARHGAP35 promotes its association with RASA1, resulting in recruitment of ARHGAP35 to the cell periphery where it inhibits RHO. Phosphorylates multiple receptor tyrosine kinases like PDGFRB and other substrates which are involved in endocytosis regulation such as RIN1. In brain, may regulate neurotransmission by phosphorylating proteins at the synapse. ABL2 acts also as a regulator of multiple pathological signaling cascades during infection. Pathogens can highjack ABL2 kinase signaling to reorganize the host actin cytoskeleton for multiple purposes, like facilitating intracellular movement and host cell exit. Finally, functions as its own regulator through autocatalytic activity as well as through phosphorylation of its inhibitor, ABI1. {ECO:0000269|PubMed:15735735, ECO:0000269|PubMed:15886098, ECO:0000269|PubMed:16678104, ECO:0000269|PubMed:17306540, ECO:0000269|PubMed:18945674}.
Molecular Weight:	129.2 kDa Including tag.
UniProt:	P42684

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:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

Images

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