Datasheet for ABIN3095004

RFWD2 Protein (AA 1-731) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	RFWD2
Protein Characteristics:	AA 1-731
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RFWD2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MSGSRQAGSG SAGTSPGSSA ASSVTSASSS LSSSPSPPSV AVSAAALVSG GVAQAAGSGG LGGPVRPVLV APAVSGSGGG AVSTGLSRHS CAARPSAGVG GSSSSLGSGS RKRPLLAPLC NGLINSYEDK SNDFVCPICF DMIEEAYMTK CGHSFCYKCI HQSLEDNNRC PKCNYVVDNI DHLYPNFLVN ELILKQKQRF EEKRFKLDHS VSSTNGHRWQ IFQDWLGTDQ DNLDLANVNL MLELLVQKKK QLEAESHAAQ LQILMEFLKV ARRNKREQLE QIQKELSVLE EDIKRVEEMS GLYSPVSEDS TVPQFEAPSP SHSSIIDSTE YSQPPGFSGS SQTKKQPWYN STLASRRKRL TAHFEDLEQC YFSTRMSRIS DDSRTASQLD EFQECLSKFT RYNSVRPLAT LSYASDLYNG SSIVSSIEFD RDCDYFAIAG VTKKIKVYEY DTVIQDAVDI HYPENEMTCN SKISCISWSS YHKNLLASSD YEGTVILWDG FTGQRSKVYQ EHEKRCWSVD FNLMDPKLLA SGSDDAKVKL WSTNLDNSVA SIEAKANVCC VKFSPSSRYH LAFGCADHCV HYYDLRNTKQ PIMVFKGHRK AVSYAKFVSG EEIVSASTDS QLKLWNVGKP YCLRSFKGHI NEKNFVGLAS NGDYIACGSE NNSLYLYYKG LSKTLLTFKF DTVKSVLDKD RKEDDTNEFV SAVCWRALPD GESNVLIAAN

Product Details

	SQGTIKVLEL V **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. • 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

Product Details

	(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:	RFWD2
Alternative Name:	COP1 (RFWD2 Products)
Background:	E3 ubiquitin-protein ligase COP1 (EC 2.3.2.27) (Constitutive photomorphogenesis protein 1 homolog) (hCOP1) (RING finger and WD repeat domain protein 2) (RING finger protein 200) (RING-type E3 ubiquitin transferase RFWD2),FUNCTION: E3 ubiquitin-protein ligase that mediates ubiquitination and subsequent proteasomal degradation of target proteins. E3 ubiquitin ligases accept ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Involved in JUN ubiquitination and degradation. Directly involved in p53 (TP53) ubiquitination and degradation, thereby abolishing p53-dependent transcription and apoptosis. Ubiquitinates p53 independently of MDM2 or RCHY1. Probably mediates E3 ubiquitin ligase activity by functioning as the essential RING domain subunit of larger E3 complexes. In contrast, it does not constitute the catalytic RING subunit in the DCX DET1-COP1 complex that negatively regulates JUN, the ubiquitin ligase activity being mediated by RBX1. Involved in 14-3-3 protein sigma/SFN ubiquitination and proteasomal degradation, leading to AKT activation and promotion of cell survival. Ubiquitinates MTA1 leading to its proteasomal degradation. Upon binding to TRIB1, ubiquitinates CEBPA, which lacks a canonical COP1-binding motif (Probable). {ECO:0000269|PubMed:12466024, ECO:0000269|PubMed:12615916, ECO:0000269|PubMed:14739464, ECO:0000269|PubMed:15103385, ECO:0000269|PubMed:19805145, ECO:0000269|PubMed:19837670, ECO:0000269|PubMed:21625211, ECO:0000303|PubMed:27041596}.
Molecular Weight:	80.5 kDa

Target Details

UniProt:	Q8NHY2
Pathways:	Photoperiodism

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

