Datasheet for ABIN3094992

RFWD3 Protein (AA 1-774) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	RFWD3
Protein Characteristics:	AA 1-774
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RFWD3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MAHEAMEYDV QVQLNHAEQQ PAPAGMASSQ GGPALLQPVP ADVVSSQGVP SILQPAPAEV ISSQATPPLL QPAPQLSVDL TEVEVLGEDT VENINPRTSE QHRQGSDGNH TIPASSLHSM TNFISGLQRL HGMLEFLRPS SSNHSVGPMR TRRRVSASRR ARAGGSQRTD SARLRAPLDA YFQVSRTQPD LPATTYDSET RNPVSEELQV SSSSDSDSDS SAEYGGVVDQ AEESGAVILE EQLAGVSAEQ EVTCIDGGKT LPKQPSPQKS EPLLPSASMD EEEGDTCTIC LEQWTNAGDH RLSALRCGHL FGYRCISTWL KGQVRKCPQC NKKARHSDIV VLYARTLRAL DTSEQERMKS SLLKEQMLRK QAELESAQCR LQLQVLTDKC TRLQRRVQDL QKLTSHQSQN LQQPRGSQAW VLSCSPSSQG QHKHKYHFQK TFTVSQAGNC RIMAYCDALS CLVISQPSPQ ASFLPGFGVK MLSTANMKSS QYIPMHGKQI RGLAFSSYLR GLLLSASLDN TIKLTSLETN TVVQTYNAGR PVWSCCWCLD EANYIYAGLA NGSILVYDVR NTSSHVQELV AQKARCPLVS LSYMPRAASA AFPYGGVLAG TLEDASFWEQ KMDFSHWPHV LPLEPGGCID FQTENSSRHC LVTYRPDKNH

TTIRSVLMEM SYRLDDTGNP ICSCQPVHTF FGGPTCKLLT KNAIFQSPEN DGNILVCTGD EAANSALLWD AASGSLLQDL QTDQPVLDIC PFEVNRNSYL ATLTEKMVHI YKWE

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 in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 against its specific reference buffer.
- 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®).

Product Details

Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	RFWD3
Alternative Name:	RFWD3 (RFWD3 Products)
Background:	E3 ubiquitin-protein ligase RFWD3 (EC 2.3.2.27) (RING finger and WD repeat domain-containing protein 3) (RING finger protein 201),FUNCTION: E3 ubiquitin-protein ligase required for the repair of DNA interstrand cross-links (ICL) in response to DNA damage (PubMed:21504906, PubMed:21558276, PubMed:26474068, PubMed:28575657, PubMed:28575658, PubMed:33321094). Plays a key role in RPA-mediated DNA damage signaling and repair (PubMed:21504906, PubMed:21558276, PubMed:26474068, PubMed:28575657, PubMed:28575658, PubMed:28691929). Acts by mediating ubiquitination of the RPA complex (RPA1, RPA2 and RPA3 subunits) and RAD51 at stalled replication forks, leading to remove them from DNA damage sites and promote homologous recombination (PubMed:26474068, PubMed:28575657, PubMed:28575658). Also mediates the ubiquitination of p53/TP53 in the late response to DNA damage, and acts as a positive regulator of p53/TP53 stability, thereby regulating the G1/S DNA damage checkpoint (PubMed:20173098). May act by catalyzing the formation of short polyubiquitin chains on p53/TP53 that are not targeted to the proteasome (PubMed:20173098). In response to ionizing radiation, interacts with MDM2 and enhances p53/TP53 ubiquitination, possibly by restricting MDM2 from extending polyubiquitin chains on ubiquitinated p53/TP53 (PubMed:20173098). Required to translesion DNA synthesis across DNA-protein cross-link adducts by catalyzing ubiquitination of proteins on single-stranded DNA (ssDNA) (PubMed:33321094). {ECO:0000269|PubMed:20173098, ECO:0000269|PubMed:21504906, ECO:0000269|PubMed:21558276, ECO:0000269|PubMed:26474068, ECO:0000269|PubMed:28575657, ECO:0000269|PubMed:28575658, ECO:0000269|PubMed:28691929, ECO:0000269|PubMed:33321094}.
Molecular Weight:	85.1 kDa
UniProt:	Q6PCD5

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies

Application Details

	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. 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