

# Datasheet for ABIN3137447 **RFWD2 Protein (AA 1-733) (Strep Tag)**



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| Quantity:                     | 250 μg   |
|-------------------------------|--|
| Target:                       | RFWD2  |
| Protein Characteristics:      | AA 1-733                                       |
| Origin:                       | Mouse  |
| Source:                       | Cell-free protein synthesis (CFPS)             |
| Protein Type:                 | Recombinant                                    |
| Purification tag / Conjugate: | This RFWD2 protein is labelled with Strep Tag. |
| Application:                  | ELISA, Western Blotting (WB), SDS-PAGE (SDS)   |

| Brand:    | AliCE®  |
|-----------|---|
| Sequence: | MSGSRQAGSG SAGTSPGSSA ASSVTSASSS LSSSPSPPSV AASAATLVSG GVAPAAGSGG |
|           | LGGPGRPVLV AAAVSGSASA GGAVSAGQSR LSCAARPSAG VGGSSSSLGS SSRKRPLLVP |
|           | LCNGLLNSYE DKSNDFVCPI CFDMIEEAYM TKCGHSFCYK CIHQSLEDNN RCPKCNYVVD |
|           | NIDHLYPNFL VNELILKQKQ RFEEKRFKLD HSVSSTNGHR WQIFQDLLGT DQDNLDLANV |
|           | NLMLELLVQK KKQLEAESHA AQLQILMEFL KVARRNKREQ LEQIQKELSV LEEDIKRVEE |
|           | MSGLYSPVSE DSTVPQFEAP SPSHSSIIDS TEYSQPPGFS GTSQTKKQPW YNSTLASRRK |
|           | RLTAHFEDLE QCYFSTRMSR ISDDSRTASQ LDEFQECLSK FTRYNSVRPL ATLSYASDLY |
|           | NGSSIVSSIE FDRDCDYFAI AGVTKKIKVY EYGTVIQDAV DIHYPENEMT CNSKISCISW |
|           | SSYHKNLLAS SDYEGTVILW DGFTGQRSKV YQEHEKRCWS VDFNLMDPKL LASGSDDAKV |
|           | KLWSTNLDNS VASIEAKANV CCVKFSPSSR YHLAFGCADH CVHYYDLRNT KQPIMVFKGH |
|           | RKAVSYAKFV SGEEIVSAST DSQLKLWNVG KPYCLRSFKG HINEKNFVGL ASNGDYIACG |

SENNSLYLYY KGLSKTLLTF KFDTVKSVLD KDRKEDDTNE FVSAVCWRAL SDGESNVLIA ANSQGTIKVL ELV

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 posttranslational 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:             | RFWD2   |  |
| Alternative Name:   | Cop1 (RFWD2 Products)   |  |
| Background:         | E3 ubiquitin-protein ligase COP1 (EC 2.3.2.27) (Constitutive photomorphogenesis protein 1 homolog) (mCOP1) (RING finger and WD repeat domain protein 2) (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. (ECO:0000250 UniProtKB:Q8NHY2). |  |
| Molecular Weight:   | 80.4 kDa  |  |
| UniProt:            | Q9R1A8  |  |
| 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

# **Application Details**

modifications.

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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 <b>Might differ depending on protein</b> . |  |
| Handling Advice: | Avoid repeated freeze-thaw cycles.  |  |
| Storage:         | -80 °C  |  |
| Storage Comment: | Store at -80°C.   |  |
| Expiry Date:     | 12 months   |  |