

Datasheet for ABIN3080014

FEM1B Protein (AA 1-627) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	FEM1B
Protein Characteristics:	AA 1-627
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This FEM1B protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MEGLAGYVYK AASEGKVLTL AALLLNRSER DIRYLLGYVS QQGGQRSTPL IIAARNGHAK</p> <p>VVRLLEHYR VQTQQTGTVR FDGYVIDGAT ALWCAAGAGH FEVVKLLVSH GANVNHTTVT</p> <p>NSTPLRAACF DGRLDIVKYL VENNANISIA NKYDNTCLMI AAYKGHTDVG RYLLEQRADP</p> <p>NAKAHCGATA LHFAAEAGHI DIVKELIKWR AAIWVNGHGM TPLKVAEESC KADVVELLS</p> <p>HADCDRRSRI EALELLGASF ANDRENYDII KTYHYLYLAM LERFQDGDNI LEKEVLPPIH</p> <p>AYGNRTECRN PQELESIRQD RDALHMEGLI VRERILGADN IDVSHPIYR GAVYADNMEF</p> <p>EQCIKLWLHA LHLRQKGNRN THKDLLRFAQ VFSQMIHLNE TVKAPDIECV LRCSVLEIEQ</p> <p>SMNRVKNISD ADVHNAMDNY ECNLYTFLYL VCISTKTQCS EEDQCKINKQ IYNLIHLDP</p> <p>TREGFTLLHL AVNSNTPVDD FHTNDVCSFP NALVTKLLLD CGAEVNAVDN EGNSALHIIV</p> <p>QYNRPISDFL TLHSIIISLV EAGAHTDMTN KQNKTPDKS TTGVSEILLK TQMKMSLKCL</p> <p>AARAVRANDI NYQDQIPRTL EEFVGFH</p>

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®).

Purity:

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

Product Details

Grade: custom-made

Target Details

Target: FEM1B

Alternative Name: FEM1B ([FEM1B Products](#))

Background: Protein fem-1 homolog B (FEM1b) (FEM1-beta) (Fem-1-like death receptor-binding protein alpha) (Fem-1-like in apoptotic pathway protein alpha) (F1A-alpha),FUNCTION: Substrate-recognition component of a Cul2-RING (CRL2) E3 ubiquitin-protein ligase complex of the DesCEND (destruction via C-end degrons) pathway, which recognizes a C-degron located at the extreme C terminus of target proteins, leading to their ubiquitination and degradation (PubMed:29779948, PubMed:33398170, PubMed:33398168). The C-degron recognized by the DesCEND pathway is usually a motif of less than ten residues and can be present in full-length proteins, truncated proteins or proteolytically cleaved forms (PubMed:29779948, PubMed:33398170, PubMed:33398168). The CRL2(FEM1B) complex specifically recognizes proteins ending with -Gly-Leu-Asp-Arg, such as CDK5R1, leading to their ubiquitination and degradation (PubMed:33398170, PubMed:33398168). Also acts as a regulator of the reductive stress response by mediating ubiquitination of reduced FNIP1: in response to reductive stress, the CRL2(FEM1B) complex specifically recognizes a conserved Cys degron in FNIP1 when this degron is reduced, leading to FNIP1 degradation and subsequent activation of mitochondria to recalibrate reactive oxygen species (ROS) (By similarity). Mechanistically, recognizes and binds reduced FNIP1 through two interface zinc ions, which act as a molecular glue that recruit reduced FNIP1 to FEM1B (By similarity). Promotes ubiquitination of GLI1, suppressing GLI1 transcriptional activator activity (PubMed:24076122). Promotes ubiquitination and degradation of ANKRD37 (By similarity). Promotes ubiquitination and degradation of SLBP (PubMed:28118078). Involved in apoptosis by acting as a death receptor-associated protein that mediates apoptosis (PubMed:10542291). Also involved in glucose homeostasis in pancreatic islet (By similarity). May also act as an adapter/mediator in replication stress-induced signaling that leads to the activation of CHEK1 (PubMed:19330022). {ECO:0000250|UniProtKB:Q9Z2G0, ECO:0000269|PubMed:10542291, ECO:0000269|PubMed:19330022, ECO:0000269|PubMed:24076122, ECO:0000269|PubMed:28118078, ECO:0000269|PubMed:29779948, ECO:0000269|PubMed:33398168, ECO:0000269|PubMed:33398170}.

Molecular Weight: 70.3 kDa

UniProt: [Q9UK73](#)

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.
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