

CellFree Sciences

The natural power of wheat driving science

High Performance Cell-Free Wheat Germ Protein Expression System

pEU Vector Set

These vectors are provided for use in combination with the wheat germ cell-free protein expression system

Product Number(s): CFS-PEU-v1.0

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This Product is for research use only.



Our products are produced under a strict quality management system offering high-quality reagents including wheat germ extracts from wheat obtained by natural farming in Japan.



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Web: <https://www.cfsciences.com/eg/> Follow us on Twitter: @CFSciences

INSTRUCTION MANUAL

Introduction

With the pEU Vector Set we are providing dedicated expression vectors for use in the wheat germ cell-free protein expression system. This includes vectors for working with the GST-, His, or DYKDDDDK-affinity tag as well as the positive control vector pEU-E01-DHFR for testing your reaction conditions. Each vector has an SP6 RNA polymerase promoter to drive RNA expression followed by the E01 enhancer. The E01 enhancer is required to initiate the translation reaction. The coding region for the protein of interest can be cloned into any of the restriction sites within the multi cloning site of the vectors. However, we advise to use the closest possible restriction site near the E01 enhancer to assure effective initiation of translation. The SP6 RNA polymerase does not require any terminator sequence to stop transcription.

Inserts can be cloned into the vectors using standard methods for DNA recombination. Please assure during vector design that your insert encodes for a proper starting methionine and has an in frame stop codon at the end; pEU vectors do not provide stop codons after the multi cloning site. Assure further that inserts are in frame when using a vector encoding for an affinity tag at the N terminus. A starting methionine may not be required when cloning in frame with an affinity tag at the N terminus. Similarly, do not include any stop codon at the end of your insert when cloning in frame with an affinity tag at the C terminus.

All our vectors have an ampicillin resistance marker. After transformation bacteria can be grown on Lysogeny Broth (LB) medium with added ampicillin at a concentration of 100 µg/mL. The vectors are high-copy vectors and should commonly give good DNA yields using regular plasmid DNA purification kits. Confirm DNA purity before use in a protein expression experiment. It may be necessary to further purify the plasmid DNA by phenol/chloroform extraction if no protein expression is observed. Refer to our other manuals for more information on the DNA requirements for protein synthesis.

Vector maps and sequences

Vector maps and vector sequences can be downloaded from our homepage at: <https://www.cfsciences.com/eg/products/vector>.

Technical support

For further technical support, contact us using the contact information given at the end of this manual.

Vectors provided

The table below lists the vectors included in the vector set.

INSTRUCTION MANUAL

No.	Vector Name		Volume	Quantity	Storage	
1	pEU-E01-MCS		0.3 mg/mL	10 µL	1	-20°C
2	pEU-E01-His-TEV-MCS-N1	N set	0.3 mg/mL	10 µL	1	-20°C
3	pEU-E01-His-TEV-MCS-N2		0.3 mg/mL	10 µL	1	-20°C
4	pEU-E01-His-TEV-MCS-N3		0.3 mg/mL	10 µL	1	-20°C
5	pEU-E01-MCS-TEV-His-C1	C set	0.3 mg/mL	10 µL	1	-20°C
6	pEU-E01-MCS-TEV-His-C2		0.3 mg/mL	10 µL	1	-20°C
7	pEU-E01-MCS-TEV-His-C3		0.3 mg/mL	10 µL	1	-20°C
13	pEU-E01-GST-PS-MCS-N1	N set	0.3 mg/mL	10 µL	1	-20°C
14	pEU-E01-GST-PS-MCS-N2		0.3 mg/mL	10 µL	1	-20°C
15	pEU-E01-GST-PS-MCS-N3		0.3 mg/mL	10 µL	1	-20°C
16	pEU-E01-MCS-PS-GST(r)-C1	C set	0.3 mg/mL	10 µL	1	-20°C
17	pEU-E01-MCS-PS-GST(r)-C2		0.3 mg/mL	10 µL	1	-20°C
18	pEU-E01-DYKDDDDK-MCS-N1	N set	0.3 mg/mL	10 µL	1	-20°C
19	pEU-E01-DYKDDDDK-MCS-N2		0.3 mg/mL	10 µL	1	-20°C
20	pEU-E01-DYKDDDDK-MCS-N3		0.3 mg/mL	10 µL	1	-20°C
21	pEU-E01-DHFR (positive control)		1.0 mg/mL	10 µL	1	-20°C

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Others

All specifications are subject to change without prior notice.

Contact

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