# **Protein Synthesis Solutions**

High-Performance Wheat Germ Cell-Free Expression System

### **Advantages**

Proven technology with high success rate for proteins from a wide range of organisms.

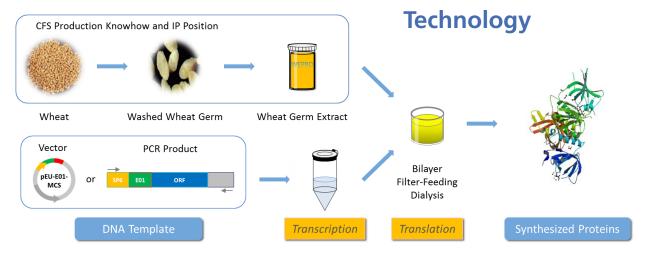
Easy to set up, fast and scalable reaction formats, full automation possible.

Dedicated reagents for expression of His-tagged and GST-tagged proteins.

Dedicated amino acid-free reagents for protein labeling, e.g. NMR, MS, and NSAA incorporation.

Dedicated reagents for expression of membrane proteins as proteoliposomes.

Key applications in antigen preparation, difficult-to-express proteins, screening assays, protein arrays.



Reference: Harbers, M. 2014. Wheat germ systems for cell-free protein expression. FEBS Lett, 588, 2762-2773

## **Protein Expression Reagents and Instruments**

#### Template Preparation

pEU vectors His-tag set GST-tag set Flag-tag set

Split-PCR primers

### mRNA Expression

SP6 RNA polymerase RNase inhibitor NTP mix Reaction buffer

#### **Protein Expression**

WEPRO7240S/G/H Reaction buffer Proteoliposome kit [<sup>13</sup>C,<sup>15</sup>N]-L-lys [<sup>13</sup>C,<sup>15</sup>N]-L-arg labeling kit Protein expression kits



### Protemist® DTII/DTII-S

Medium Scale Synthesis

Transcription, translation, and purification (6 mL scale) 6 proteins/run up to  $\sim$ 500  $\mu$ g of purified protein 30 hr run 24 proteins/run up to  $\sim$ 200  $\mu$ g crude protein 24 hr run (Data for GFP expression)



#### **Protemist® XE**

Large Scale Production Translation only

~10 mg/ml crude protein 24hr run ~10 to 100 ml reaction scale (Data for GFP expression)

# **Protein Synthesis Services**

Template preparation: PCR, cloning, and gene synthesis.

Protein expression: different reaction scales from test expression to mg scale.

Fast turnaound time and option to use of automated platforms.



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euriso-top

CFS protein-expression reagents and kits are distributed in North America by Cambridge Isotope Laboratories, Inc. (CIL) and in Europe by Euriso-Top, SAS.

To contact CIL, please send an email to your local sales representative or cilsales@isotope.com.

To contact Euriso-Top, please send an email to sales@ eurisotop.com.

