



# Alexandrov Cell-Free Protein Expression Kit

**Description:** The Alexandrov Cell-Free Protein Expression kit represents a set of 88 open reading frames cloned into the pCellFree vector, which enables protein expression in any *in vitro* translation system. The gene set was carefully chosen to perform statistically relevant benchmarking of cell-free expression systems. The set of proteins encoded is one of the most popular ones in the biomedical research community and range in size from 4 to 156 kDa, which enables the user to characterize the efficiency of their cell-free system in correlation to the size of the product. The analysis can be conveniently performed using the N-terminal eGFP tag carried by all constructs. More information can be found at:

[www.addgene.org/kits/alexandrov-cellfree-pek](http://www.addgene.org/kits/alexandrov-cellfree-pek)

**Reference:** Performance benchmarking of four cell-free protein expression systems. Gagoski D, Polinkovsky ME, Mureev S, Kunert A, Johnston W, Gambin Y, Alexandrov Küth. *Biotechnol Bioeng* 2015 Aug 24. doi: 10.1002/bit.25814. (PubMed ID: 26301602).

**Handling and Storage:** Store glycerol stocks at -80°C and minimize freeze-thaw cycles. To access a plasmid, keep the plate on dry ice to prevent thawing. Using a sterile pipette tip, puncture the seal above an individual well and spread a portion of the glycerol stock onto an agar plate. To patch the hole, use sterile tape or a portion of a fresh aluminum seal.

**Note:** These plasmid constructs are being distributed to non-profit institutions for the purpose of basic research.

Please contact Addgene at [help@addgene.org](mailto:help@addgene.org) with any questions.