

For more information



Rebuilt cell-free system (PUREfrex<sup>®</sup>);

*beyond cell, beyond life with synthetic approach*



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**COO**  
**GeneFrontier Corporation**

**iGEM 2023**  
**2-5 November 2023**



GeneFrontier

# PUREfres<sup>®</sup>

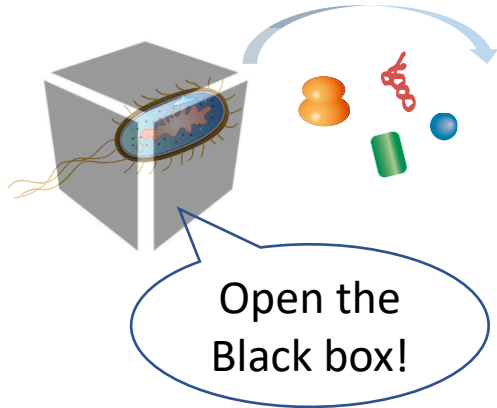
-Customize expression toolbox for your research-

Totally constructive, molecular based system

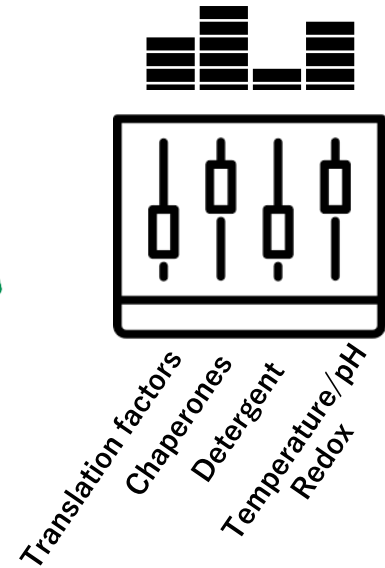
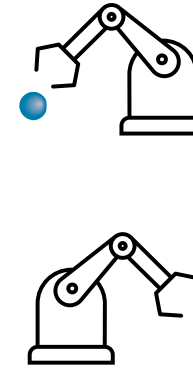
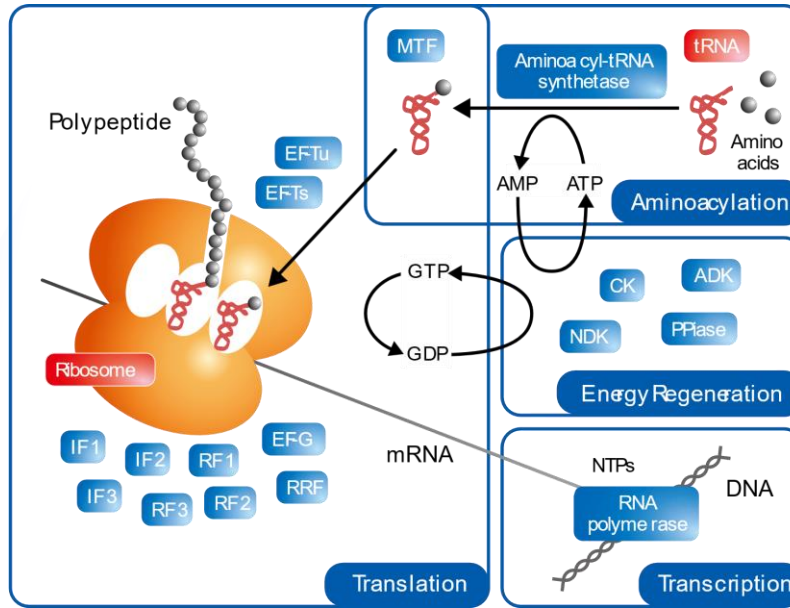
For more information



Only necessary molecules for transcription/translation



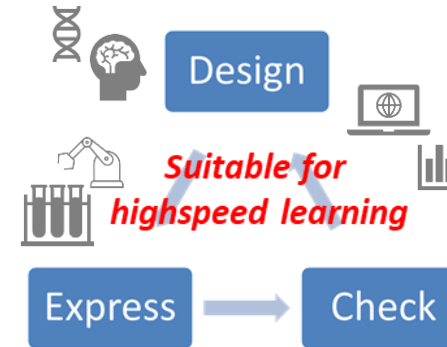
- ✓ Rebuilt cell-free system
- ✓ Tunable for your biologics
- ✓ Simple, Fast
- ✓ Suited for High throughput system
- ✓ Very low contaminants



100mL package will be launched soon!



Great Flexibility from basic research to industrial applications



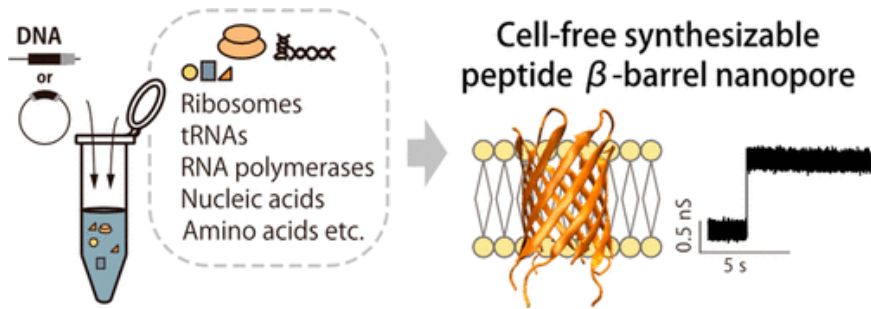
*Versatile and Robust*  
 Platform for protein synthesis

*Huge potential as*  
 New platform in Biotech industry

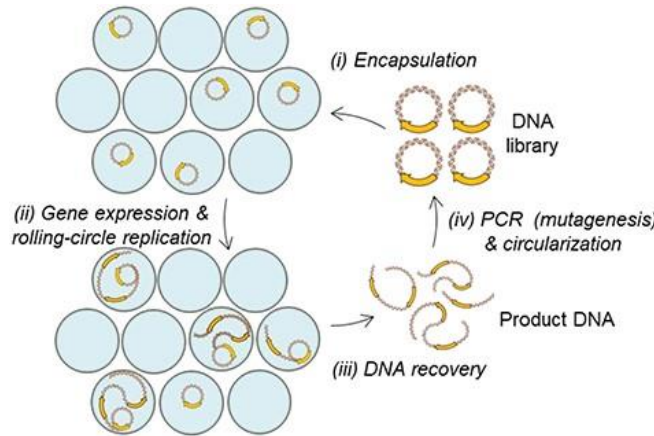




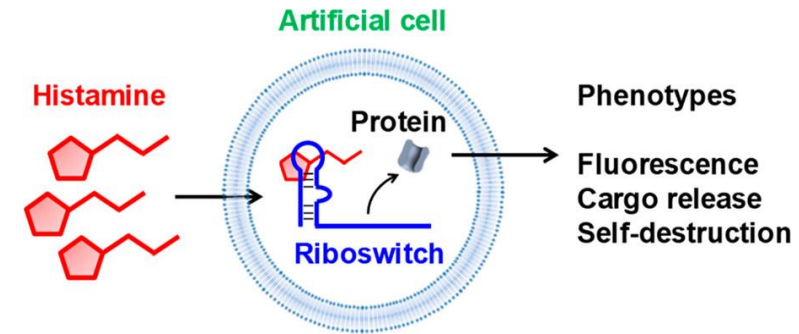
## -Broad applications, yet to come!-



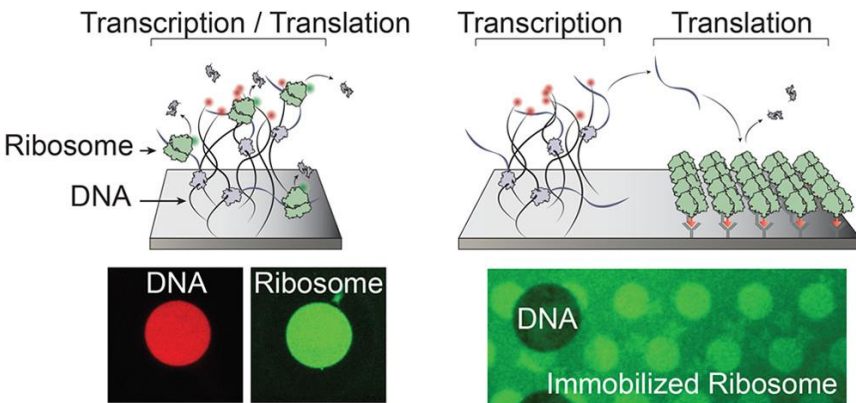
[Fujita et al. \(2023\) ACS Nano. vol.17\(4\), p.3358.](#)



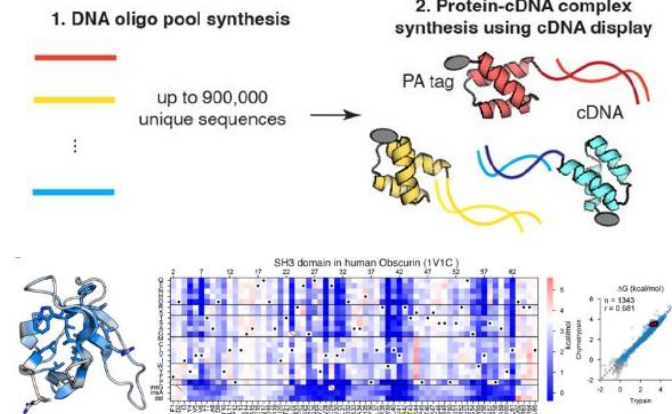
[Sakatani Y, et al. \(2019\) PEDS, 32\(11\) p481, https://doi.org/10.1093/protein/gzaa011](#)



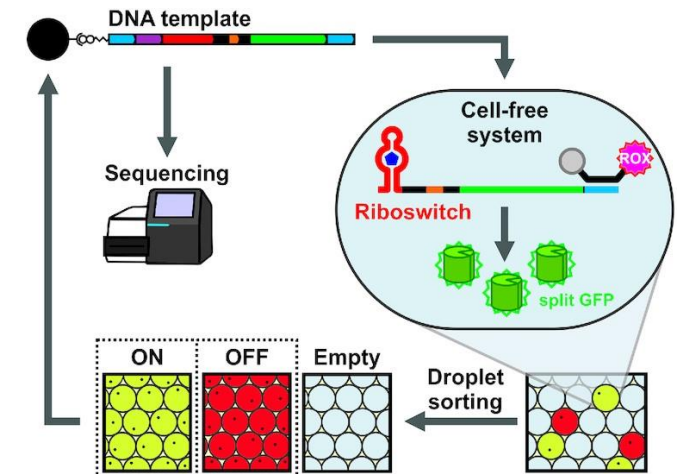
[Dwidar et al. \(2019\) J. Am. Chem. Soc. vol.141, p.11103.](#)



[Levy et al. \(2021\) ACS. Synth. Biol. vol.10, p.609.](#)



[Tsuboyama et al. \(2023\) Nature, 620, p434.](#)



[Tabuchi et al. \(2022\) Nucleic Acids Res https://doi.org/10.1093/nar/gkac152](#)



**To change the platform in biotech industry**

*To be free, or not to be free, from limitation of living system?*

**<https://purefrex.genefrontier.com/>**

***Please drop by our site or Kiosk booth!***

**Support program to iGEMers !!**

**Free reagent support for new ideas based on PUREfrex**

**Contact us via our web site !**