Quant & m Biosciences

Nplify™

Nplify[™] is a benchtop system suitable for cell-free enzymatic production of linear DNA from plasmid with Gene of Interest.

This system is fully automated and integrates PCR-based amplification and purification steps.

Currently we have developed one type of equipment to meet your needs for linear DNA production.

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Specifications

| | Per batch | Per year |
|--------|------------------------------------|-------------------------------------|
| Input | 461 µg of DNA | 69.2 mg of DNA |
| Output | Up to 74 mg of purified linear DNA | Up to 11.1 g of purified linear DNA |
| Batch | 1 per day | 150 per year |

Dimensions Work on prototype on-going. Dimensions unavailable

Benefits

- Speed

Days instead of months: Starting from a cellfree working bank, only a few days to obtain the linear DNA template for mRNA production without fermentation, nor plasmid linearization

- Highly efficient

Ready-to-use for IVT (*In-vitro* transcription): Generate linear DNA with 100% of the desired coding sequence via optimized primers design, ready for an optimum RNA synthesis

- Versatile

Adaptable DNA production: Rapid construct modification through our dedicated DNA design service, as well as flexibility on DNA sequences used as a template

- Safe & clean

E.coli-free product: Absence of biological and contamination risks. No residual *E.coli* genomic DNA and proteins, nor antibiotic resistance genes in the final product

- Stable DNAs

Homogenous polyA-tail: Optimized process generates final DNA product ranging from 2 to 12kb with poly-A/T tail sizes from 40 to 120nt

- Scalable & reduced cost

Compact equipment allows a µg to g scale productivity for a fraction of the CAPEX and OPEX costs of a fermentation-based production