ENFINIA™ Plasmid DNA

Specifications and Submission Guidelines

ENFINIA Plasmid DNA is long, linear, high-accuracy DNA cloned into a plasmid vector – sequenced and shipped from our facilities in the US as fast as 10 business days. Now the unmatched speed, length, and complexity of our ENFINIA Linear DNA is available as a cloned plasmid. With plasmids up to 19 kb and inserts as long as 15 kb, you can iterate through designs faster, complete projects, faster – all while avoiding the cost and long lead time of conventional clonal gene synthesis suppliers.

FEATURES

NGS-verified plasmids up to **19 kb**

Clonal genes from **300 bp to 15 kb**
depending on the vector selected

Predominantly supercoiled; containing **less than 10% genomic DNA** by mass

Select from a library of standard vectors including:

- pAAV2 (with CMV, CAG, hSyn or AAV2 ITRs only)
- pUC19 (with AMP or KAN marker)
- pBR322
- psaRNA
- pET28
- pcDNA3.1

Prep types:

- Mini-prep
- Midi-prep
- Maxi-prep

Typical turnaround times:

- Standard complexity ships in **10 - 15 business days**
- High complexity ships in **12 - 17 business days**
- Add 3 business days for Midi- and Maxi-preps

INSERT SEQUENCE SUBMISSION ACCEPTANCE CRITERIA

	Standard Complexity	High Complexity
Insert Sequence Length	300 – 15,000 bp	300 – 15,000 bp
Overall GC Content	25 – 65%	20 – 80%
100 bp GC Content	22 – 75%	12 – 83%
Local GC Variation	up to 60%	up to 70%
Repeats	up to 20 bp	up to 150 bp
Homopolymers*	up to 7 bases for G/C and 8 bases for A/T	up to 8 bases for G/C and 12 bases for A/T

1. ENFINIA Plasmid DNA typically ships at yields of: Mini-prep: 50 ng to 1 µg, Midi-prep: 10 µg to 100 µg, Maxi-prep: 100 µg to 1 mg per clone† (dependent on sequence and vector). Abnormally low yields are considered a failed synthesis.
2. ENFINIA Plasmid DNA is delivered as dried-down DNA in a 96-well microplate, one plasmid per well.
3. Each ENFINIA Plasmid DNA sequence is NGS-verified before shipment.
4. Insert sequences should not contain elements that are toxic to *E.coli.*

** At this time, the QC methods we use for production do not provide high confidence in the fidelity of A/T homopolymer sequences longer than 12 bp and G/C homopolymer sequences longer than 8 bp. We are working to address this in the near future.*

† Midi-prep and Maxi-prep DNA is purified using Macherey-Nagel NucleoBond Xtra Plus EF transfection grade kits and reported as measured by NanoDrop. Mini-prep yields are reported as measured by Thermo Fisher Scientific Quant IT assay.

ELEGEN | INNOVATION IS OUR DNA
3565 Haven Ave, Suite 3, Menlo Park, CA 94025

Order Now
ecommerce.elegen.com