

Ntensify[®]micro

(sa)mRNA production system for screening needs and scalable production

The **Ntensify[®] micro** is an advanced (sa)mRNA synthesis system designed for ultimate flexibility, supporting multiple screening formats and scalable production. This compact, manual equipment enables seamless *in vitro* transcription (IVT) processes for various research applications.

The system integrates the **Ntensify[®] Process protocol**, ensuring plug-and-play functionality for streamlined (sa)mRNA production and purification, with parameters adaptable to specific experimental needs.



WIDTH 34 cm 13.39 in	HEIGHT 18 cm 7 in	DEPTH 32 cm 12.6 in	WEIGHT 11 kg 24.25 lb
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PROCESS

REAGENTS

DISPOSABLES

EQUIPMENT

Benefits

Unmatched Flexibility for Diverse Applications

- Supports multiple formats: 96-well plates for high-throughput screening.
- 20 mL volumes for de-risking at the midi scale.

User-Friendly Design & Integration

- Compact footprint: easily fits under a laminar flow hood, making it ideal for various lab environments.
- Touchscreen interface: enables real-time control and parameter adjustments for optimized workflows.
- Seamless protocol integration: includes the Ntensify[®] Process protocol, mirroring GMP-ready automation.

High-Performance

- Production capacity: from 0.4mg up to 128 mg of (sa)mRNA.
- Optimized reagent mixes for 20 mL IVT reactions, ensuring consistency.
- Flexible parameters: adjustable temperature, shaking, IVT time, and reaction volumes.

Cost-Effective & Scalable

- Reagent mixes equivalent to our automated systems, reducing experimental variability.
- Scalability: suitable for both small-scale R&D and larger pre-clinical production.

Applications

Research (96-well format)

- Construct-agnostic process — screen up to 96 different constructs in parallel, no reoptimization needed per candidate
- High-throughput (sa)mRNA screening
- R&D: cell-based assays
- Customized (sa)mRNA libraries for drug discovery

Development (20 mL format, R&D mode)

- Same process, reagent mixes, and equipment as research scale — no tech transfer required
- Scale-up of selected candidates for *in vivo* testing: ADME/Tox studies, dose escalation, tolerance testing
- Stability studies and candidate down-selection ahead of GMP transition

Production (20 mL format, validated GMP equipment + HQG reagents)

- Same equipment, qualified for GMP use — no process change from development scale
- Pre-clinical to clinical drug substance manufacturing
- Seamless transition from development to production without re-validating the process itself

One system, one process, from first screen to clinical batch.

Flexible configuration

	SCREENING CONFIGURATION	SCALABLE PRODUCTION
Input	Up to 96 different constructs at 5 µg of linear DNA per construct	A single construct of up to 1 mg of linear DNA
Output	Up to 96 different constructs at 2 mg of naked (sa)mRNA per construct	Up to 100 mg of the same (sa)mRNA construct
Batch volume	100 µL per well	20 mL per reaction

The Ntensify micro[®] is designed to revolutionize (sa)mRNA production with unparalleled flexibility, performance, and cost efficiency.

Contact us today — bd@quantoom.com