

Our company

At Quantoom Biosciences, scientists and engineers are committed to solving some of the biggest challenges facing (sa)mRNA-based vaccines and therapeutics production.

Located in Belgium, Quantoom Biosciences thrives in a dynamic biotech ecosystem, driving innovation in RNA (i.e. mRNA and saRNA) production to make life-changing therapies available to everyone, everywhere.

BELGIUM

Quantoom Biosciences Headquarters.
Showroom for Ntensify® technologies.

Visit our website



www.quantoom.com

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Get in touch!

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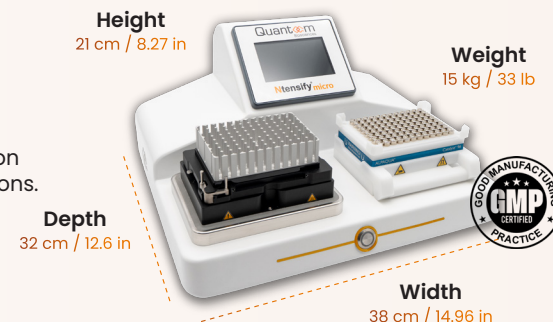
Ntensify[®]micro

Quantoom
Biosciences

RNA production and purification for R&D and process development purposes

The **Ntensify[®] micro** is an advanced (sa)mRNA production system designed for ultimate flexibility, supporting 96-well plates & 20mL tubes. This compact, manual equipment enables seamless *in-vitro* transcription (IVT) and purification processes for various research applications.

The system integrates the **Ntensify process protocol**, ensuring plug-and-play functionality for streamlined mRNA and saRNA production and purification, with parameters adaptable to specific experimental needs.



The equipment comes supplied with **material certificates** and an optional **IQ/OQ package**, which can be performed either by your team or ours.

Key figures

Up to 128 mg
in a half day

Optimized for
Ntensify process

1-pot IVT
1-step DSP

mRNA and saRNA
process included

Flexible configuration
96 well plate OR 20 mL bioreactor

Redesigned Process

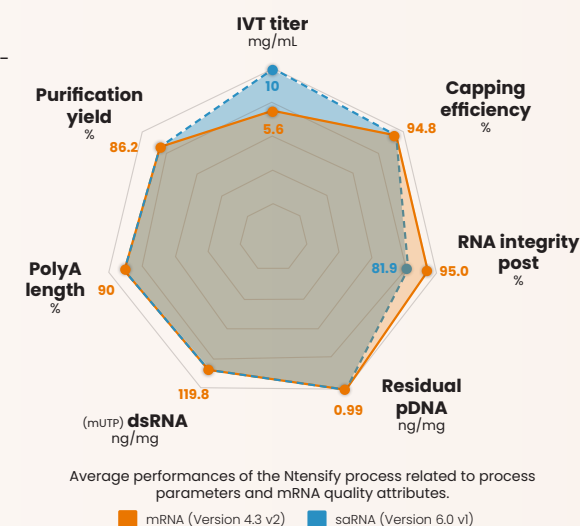
By opting for a single-step magnetic bead-based purification method to streamline DSP and reduce process-related losses.

Optimized Process

By optimizing the IVT & DSP to increase RNA quality, minimizing the DSP constraints.

Demonstrated by robust DoE

- > 2000 individual mRNA reactions
- > 500 individual saRNA reactions
- 100+ Different constructs tested
- Different mRNA Sizes (1 to 4kb)
- Different saRNA sizes (8 to 12Kb)



Trusted by



Supported by



Member of



Tailored for the **Ntensify process**

Conventional process	IVT	Post transcriptional capping	Oligo DT	Polish	UF/DF	Simplified process By reducing the number of steps & required unit operations
Ntensify process	IVT with co-transcriptional capping		Silica-based magnetic beads			Accelerated process By reducing the number of steps & automating the execution

Throughput **flexibility**

Click or scan the QR code to watch the video presentation



Starting from 96 constructs at 100 µL

Up to 1 construct at 20 mL

Mixes of **reagents**

The Ntensify micro is tailored to work with our Ntensify R&D kit, containing all necessary mixes of reagents.

Supplied ready-to-use with the following certificates :

CoA	AOF
TSE BSE	RNAse
SDS	Bioburden
Endotoxin	



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Training **packages**

Classroom teaching

Understand the necessary details of the manufacturing methods operated by Quantoom's technologies.

Hands on teaching

Get acquainted with Quantoom's Technologies and become fully autonomous.

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Ntensify **product line**

All the production technologies in our product line leverage the same Ntensify process, at any scale. This confers reproducibility to our product line and enables consistency of CQA's and CPP's at every scale, from R&D to commercial production in GMP facilities.

mano



Entry point for RNA
construct assessment
In vitro & in vivo studies

micro



Drug discovery
& pre-clinical phase
Up to 96 constructs

mini



Drug discovery
& pre-clinical phase
Up to 48 constructs

midiflex



Clinical trials &
commercial production

mRNA capacity per batch (purified naked mRNA)

125 µg - 3 mg

400 µg - 100 mg

8 mg - 92 mg

0.1 g - 4 g

siRNA capacity per batch (purified naked siRNA)

320 µg - 2.5 mg

640 µg - 128 mg

10 mg - 123 mg

0.128 g - 5 g

Level of automation & run duration

Manual in 4 hours

From 4 to 6 hours

Automated in under 1 day

Curious to hear more? Reach out to bd@quantoom.com