PRESS RELEASE

Biomay Launches Optimized Cas9 mRNA with Low dsRNA Content

Vienna, March 17, 2026. Biomay announces the availability of an **optimized mRNA-variant** encoding the **nuclease spCas9** featuring enhanced design and purity characteristics. The new product is immediately available in the quality grades **GMP** and **RUO**.

The Cas9 coding sequence is human codon-optimized, incorporates N1-methyl-pseudouridine (m1Ψ), and is flanked by human untranslated regions (UTRs) to support efficient translation. A well-established Cap1 structure is used as the 5′-cap. Characteristically, the molecule further contains a **poly(A) tail of 145 adenosines**, exceeding the length used in comparable products and thereby supporting improved **mRNA stability** and **translational efficiency**.

Importantly, as a result of continuous process intensification and many years of GMP manufacturing experience, Biomay's Cas9 mRNA exhibits **high purity and integrity**. In particular, double-stranded RNA (**dsRNA**) – a key impurity generated during in-vitro mRNA transcription – is present at **exceptionally low levels** (dsRNA = 0.0005 % w/w). In addition, the product shows **ultra-low endotoxin** levels (< 0.2 EU/mg mRNA), **high 5′-capping efficiency** (> 95 %), and **high general integrity** (> 90 %).

Biomay's Cas9 mRNA is produced using a **fully integrated GMP manufacturing** platform supported by a robust panel of validated analytical assays. Functional performance has been confirmed in cell-based assays, demonstrating equivalence to leading benchmark Cas9 mRNA products.

As an **FDA-inspected manufacturer**, Biomay is committed to delivering mRNA products of the **highest quality standards**, supporting clients from early research to clinical-stage programs. With this launch, Biomay further strengthens its position as a one-stop provider of mRNA based tools. Whether for early-stage research or clinical development, Biomay's Cas9 mRNA provides reliability, quality, and speed – **from a single trusted source**.

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About Biomay:

Biomay AG is a fully integrated Contract Development and Manufacturing Organization (CDMO) based in Vienna, Austria. Founded in 1984, recombinant protein expression in *E. coli* has been Biomay's core business from the beginning.

Today, Biomay offers cGMP services for the manufacturing of messenger RNA (mRNA), circular plasmid DNA, linear IVT-template DNA, and therapeutic recombinant proteins. Biomay operates a dedicated mRNA Competence Center for cGMP manufacturing and QC testing of mRNA drug substance and drug product (clinical and commercial).

The company's services include process and analytical development, cell banking, R&D material supply, cGMP manufacturing, lipid nanoparticle (LNP) formulation, and aseptic fill-finish. Biomay's manufacturing facilities are inspected by the U.S. FDA.

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