



Product Catalog 2026

Advancing Personalized Medicine



Stable



Non-Toxic



Precise



Cell Permeable



India's Only
Dedicated PMO
Manufacturer



**2 Granted
US Patents**
Proprietary
GMO-PMO
technology



**40-60%
Lower Cost**
vs. US / EU
competitors



About GenElixir

Advancing Personalized Medicine

GenElixir is a dedicated manufacturer of Phosphorodiamidate Morpholino Oligonucleotides (PMOs), GMO-PMO chimeras and morpholino monomer building blocks. Founded in 2019 and headquartered in Visakhapatnam, India, GenElixir combines custom synthesis, HPLC testing and scalable manufacturing to support research and translational programs.

Why Scientists Choose GenElixir



High Purity

Consistent high-purity materials for reliable research outcomes.



Custom Synthesis

Tailored PMO, GMO-PMO and monomer solutions.



Batch Traceability

Documentation from raw materials to final product.



Analytical QC

Rigorous in-house and partner quality workflows.



Scalable Manufacturing

From milligrams to kilograms with validated processes.



Fast Turnaround

Responsive service that keeps programs moving.

Product Families

MO

Morpholino Oligomers

Custom PMO, control PMO and functionalized 5' PMO products.

GMO

GMO-PMO Chimeras

Patent-protected self-transfecting morpholino oligomers.

MM

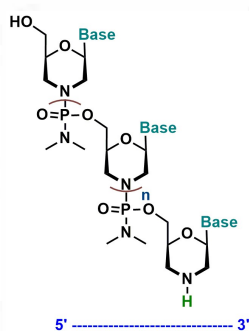
Morpholino Monomers

SMMT, SMMF, CMMT and CMMF building blocks.

Morpholino Oligomers

PMO Product Line

Custom-synthesized, sequence-specific PMO products for research programs. Customers provide the 5' to 3' sequence; GenElixir synthesizes, purifies and QC-tests the final oligonucleotide. Functional 5' options support click chemistry, maleimide conjugation, solubility tuning and in vivo workflow design.

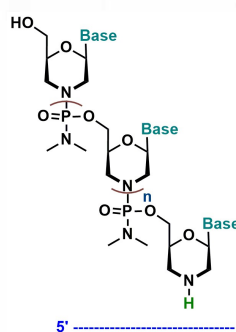

GILPM0301-T

Custom Specified PMO

Sequence-specific antisense PMO

Research-ready PMO for gene silencing, steric blocking and splice correction.

Custom sequence 20°C >=85% HPLC

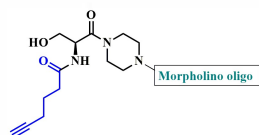

GILPM0301-C

Control Sequence

Scrambled negative control

Recommended comparison control to distinguish sequence-specific effects from nonspecific responses.

Control sequence 20°C >=85% HPLC

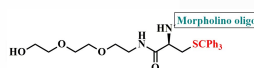

GILPM0302

5'-Alkyne-Serine PMO

Click chemistry handle

Alkyne-containing serine handle for azide-bearing dyes, PEGs, carbohydrates, lipids and delivery agent.

CuAAC Bioconjugation

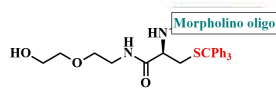

GILPM0303

5'-TEG-Cysteine PMO

Maleimide chemistry

TEG spacer improves solubility and reduces steric interference during conjugation.

TEG spacer Cysteine Michael addition

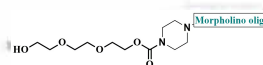

GILPM0304

5'-DEG-Cysteine PMO

Compact maleimide handle

Shorter spacer option when close payload proximity to the oligo is preferred.

DEG spacer Compact Michael addition


GILPM0305

5'-TEG PMO

Neutral spacer

Non-reactive TEG tail for solubility and pharmacokinetic tuning.

Solubility PK modifier In vivo studies



Applications

- Gene silencing
- Steric blocking
- Splice correction



Quality

HPLC-purified,
lyophilized,
sequence-dependent QC



Ordering

Minimum 250 nmol;
400 / 500 nmol
and custom scales

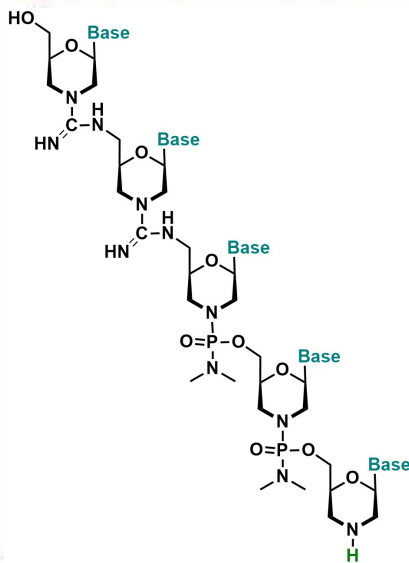
GMO-PMO Chimera

Patent-Protected Self-Transfecting Morpholino Platform

The GMO-PMO chimera integrates guanidinium-functionalized morpholino residues into the PMO backbone. These units improve cellular uptake and can eliminate the need for lipofection reagents, electroporation or viral delivery systems.

GILGMO401
GMO

Custom GMO-PMO Chimera



Patent-protected antisense chimera with custom-defined sequence and guanidinium functionalization.

GILGMO402

Control GMO-PMO Chimera

Scrambled negative control with the same guanidinium residue pattern as the antisense chimera.

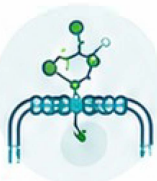
Delivery Comparison


Traditional PMO

PMO + transfection reagent


GMO-PMO

Direct cellular uptake


Self-transfecting design

Cell-permeable without external delivery agents.


Non-Toxic

Designed to support delivery with minimized toxicity concerns.


Advanced programs

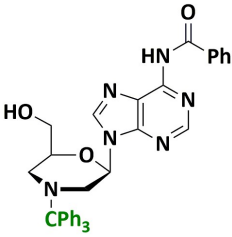
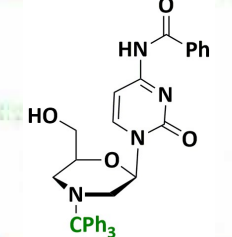
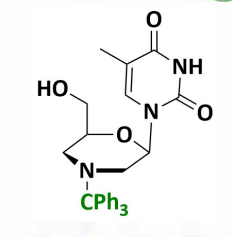
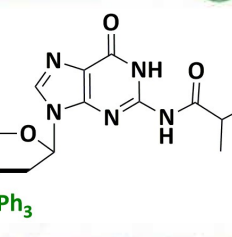
Research and translational oligonucleotide development.

Standard Morpholino Monomers

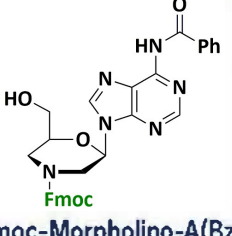


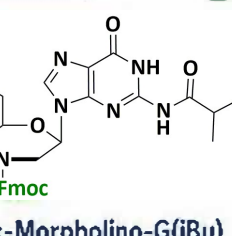
SMMT and SMMF Product Families

High-purity standard morpholino monomers for PMO synthesis workflows. GenElixir supplies both trityl-protected and Fmoc-protected A, C, T and G monomer sets.

SMMT Trityl-Protected Morpholino Monomers

<p>GILSMMT001 (A)</p>  <p>Morpholino-A(Bz) [Trityl] MW 596.6910 g/mol ≥95% HPLC • 4 °C • 2 years</p>	<p>GILSMMT002 (C)</p>  <p>Morpholino-C(Bz) [Trityl] MW 572.6650 g/mol ≥98% HPLC • 4 °C • 2 years</p>	<p>GILSMMT003 (T)</p>  <p>Morpholino-5-Me U [Trityl] MW 483.560 g/mol ≥95% HPLC • 4 °C • 2 years</p>	<p>GILSMMT004 (G)</p>  <p>Morpholino-G(iBu) [Trityl] MW 578.6730 g/mol ≥95% HPLC • 4 °C • 2 years</p>
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SMMF Fmoc-Protected Morpholino Monomers

<p>GILSMMF001 (A)</p>  <p>Fmoc-Morpholino-A(Bz) MW 576.6130 g/mol ≥95% HPLC • 4 °C • 2 years</p>	<p>GILSMMF002 (C)</p>  <p>Fmoc-Morpholino-C(Bz) MW 552.5870 g/mol ≥95% HPLC • 4 °C • 2 years</p>	<p>GILSMMF003 (T)</p>  <p>Fmoc-Morpholino-5-Me-U MW 463.4900 g/mol ≥95% HPLC • 4 °C • 2 years</p>	<p>GILSMMF004 (G)</p>  <p>Fmoc-Morpholino-G(iBu) MW 558.5950 g/mol ≥95% HPLC • 4 °C • 2 years</p>
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Complete base set

A, C, T and G monomers in both protecting strategies.



High purity

All SMMT/SMMF products listed at ≥98% HPLC.



Stable storage

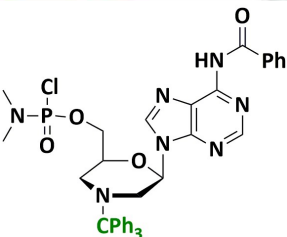
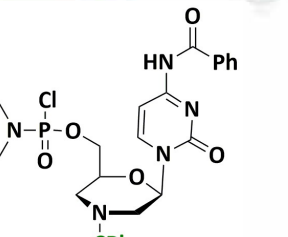
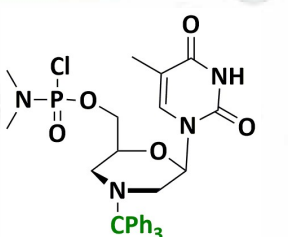
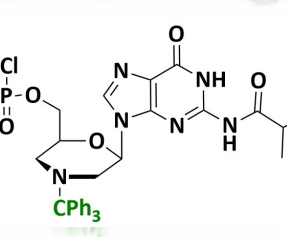
Store at 4 °C with 2-year retest period.

Activated Morpholino Monomers




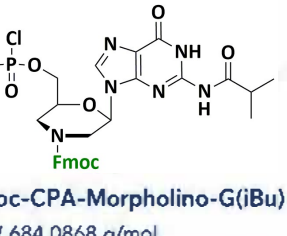
CMMT and CMMF Chlorophosphoramidate Product Families

Activated chlorophosphoramidate morpholino monomers are direct building blocks for solid-phase PMO synthesis. GenElixir supplies both trityl-protected and Fmoc-route activated monomer sets.

CMMT Trityl-Protected Chlorophosphoramidate Monomers

<p>GILCMMT001 A</p>  <p>CPA-Morpholino-A(Bz) [Trityl] MW 722.1828 g/mol >=95% HPLC · -20 °C · 6 months</p>	<p>GILCMMT002 C</p>  <p>CPA-Morpholino-C(Bz) [Trityl] MW 698.1568 g/mol >=95% HPLC · -20 °C · 6 months</p>	<p>GILCMMT003 T</p>  <p>CPA-Morpholino-5-Me-U [Trityl] MW 609.059 g/mol >=95% HPLC · -20 °C · 6 months</p>	<p>GILCMMT004 G</p>  <p>CPA-Morpholino-G(iBu) [Trityl] MW 704.164 g/mol >=95% HPLC · -20 °C · 6 months</p>
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CMMF Fmoc-Protected Chlorophosphoramidate Monomers

<p>GILCMMF001 A</p>  <p>Fmoc-CPA-Morpholino-A(Bz) MW 702.1048 g/mol >=95% HPLC · -20 °C · 12 months</p>	<p>GILCMMF002 C</p>  <p>Fmoc-CPA-Morpholino-C(Bz) MW 678.0788 g/mol >=95% HPLC · -20 °C · 12 months</p>	<p>GILCMMF003 T</p>  <p>Fmoc-CPA-Morpholino-5-Me-U MW 588.9818 g/mol >=95% HPLC · -20 °C · 12 months</p>	<p>GILCMMF004 G</p>  <p>Fmoc-CPA-Morpholino-G(iBu) MW 684.0868 g/mol >=95% HPLC · -20 °C · 12 months</p>
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Activated chemistry

Direct building blocks for PMO synthesis workflows.



Advanced synthesis

Designed for labs operating synthesis platforms.



Cold-chain storage

CMMT: 6 months. CMMF: 12 months at -20 °C.

Note: Trityl- and Fmoc- protected monomers may have limited regional availability, since shipping duration affects packaging, cold-chain logistics, and quality control requirements.

Contact Us

Let's collaborate for a healthier future.

Our team is ready to support your research with high-quality products, technical expertise and reliable service you can count on.



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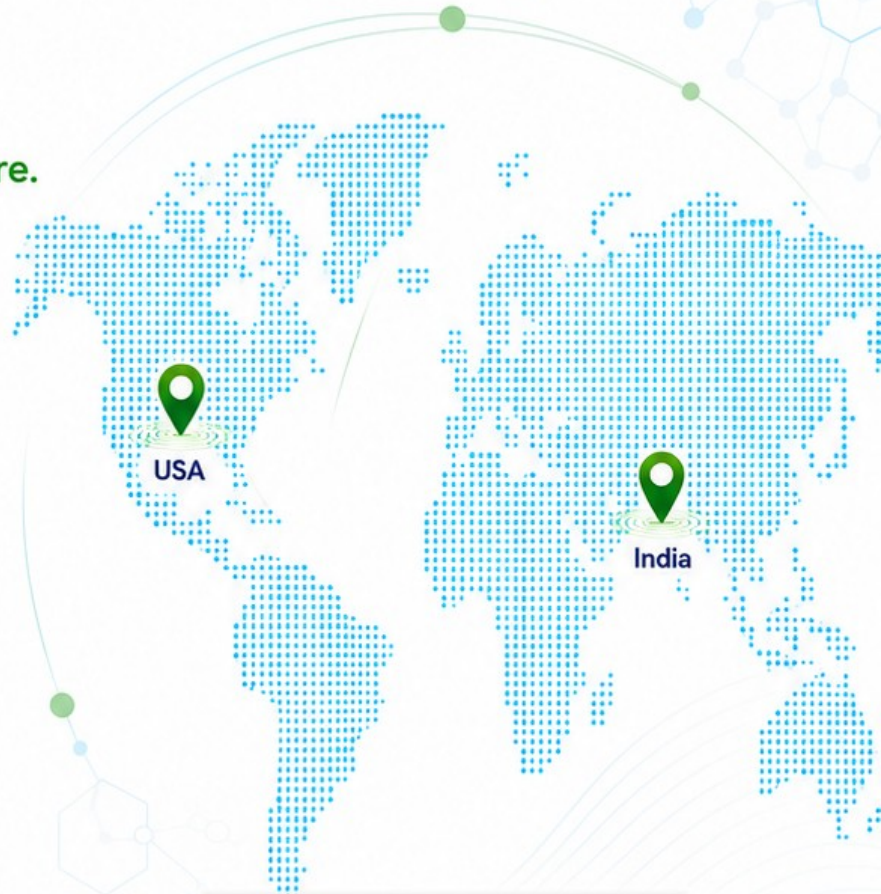
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for a better tomorrow.