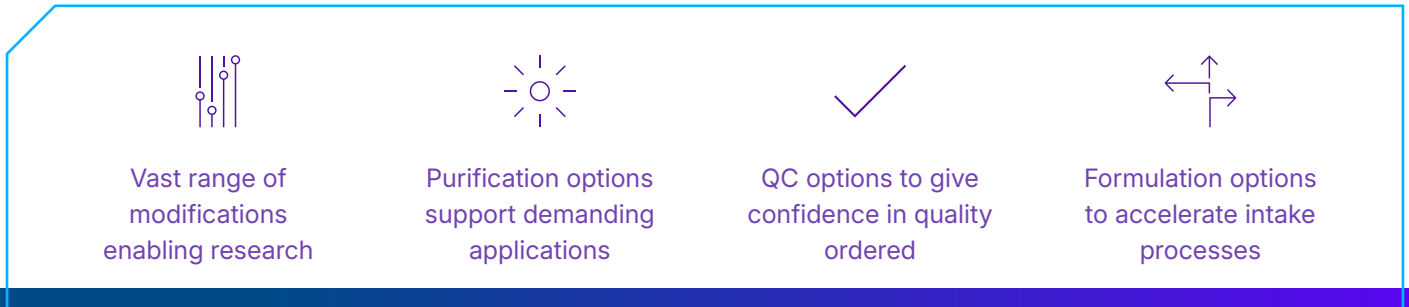




IDT RUO Custom DNA and RNA Oligos

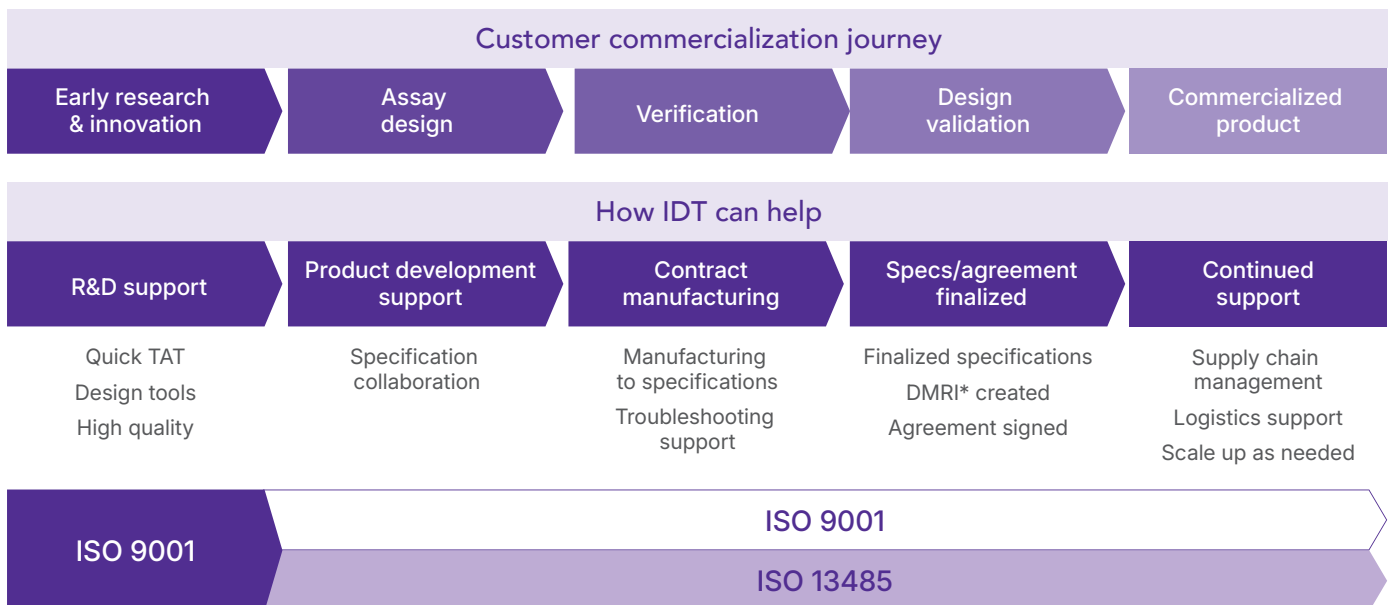
Customize to your research needs



IDT Custom Oligos

IDT custom oligos are manufactured on propriety synthesis platforms and automation using optimized phosphoramidite chemistry for sustainable manufacturing. IDT offers extensive modification and purification options and a large menu of formulation services to meet your demanding project needs. Ultramer™ DNA or RNA oligos are long, high-quality oligos best suited for demanding applications such as cloning, ddRNAi, homology-directed repair, and gene construction.

Trusted partnership from research to commercialization



GMP refers to products manufactured under ISO 13485: 2016 QMS. Purchaser is solely responsible for all decisions regarding the use of these products and any associated regulatory or legal obligations for their legal marketing.

*DMRI is Device Master Record Index and is only available through ISO 13485:2016 manufacturing.

RUO For Research Use Only. Not for use in diagnostic procedures.

idtdna.com



IDT Quality—More than just high purity



Performance

Save time in the lab—
not troubleshooting



Scalability

As your project scope
grows, we can support
you from research to
commercialization



Configurable

No limit to your research
creativity—build your
custom option on our
website



Delivery

On-time delivery
means more results
and less waiting



Support

As you are developing your
project, let our scientists
support you through your
journey

IDT Quality First

Quality is our priority with multiple QC checks performed throughout manufacturing and stringent QA policies based on standard work from years of oligo manufacturing experience. IDT oligos have very high coupling efficiency enabling the manufacture of complex DNA and RNA products. TAT and delivery consistency is key with 90% of small-scale DNA, standard desalt orders ship within 24 hours.

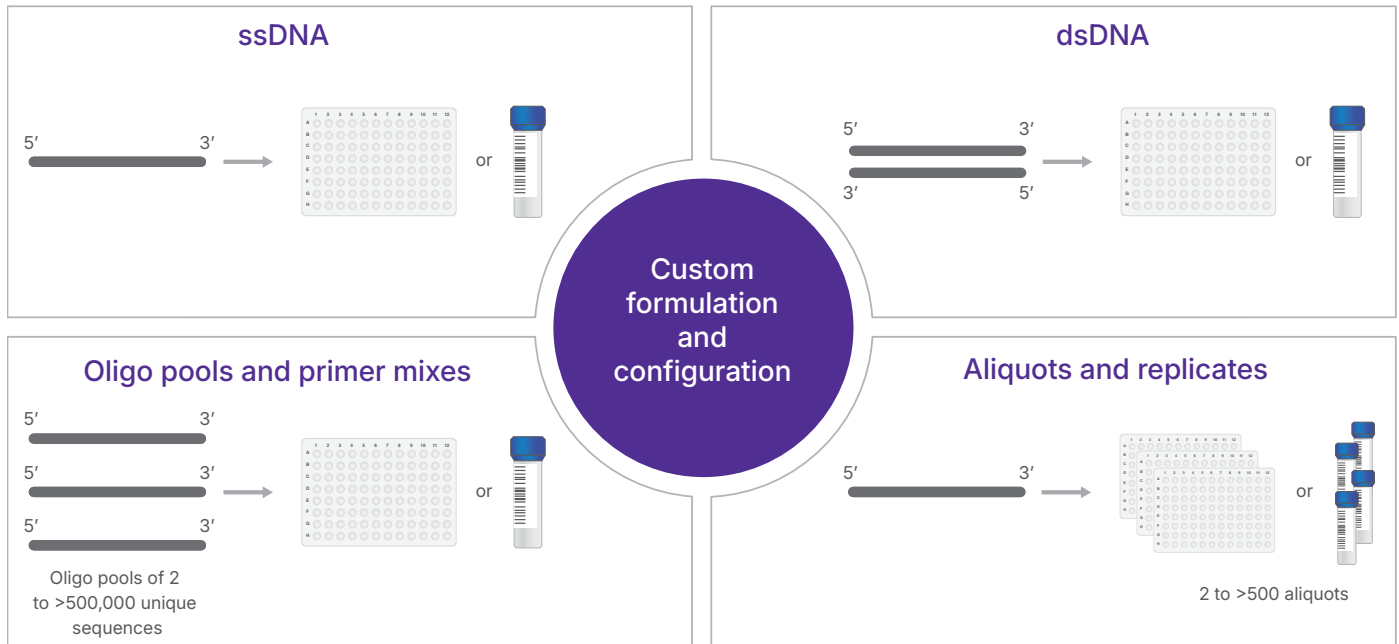
Modifications

	Description	Examples	Applications
Attachment chemistry and linkers	Link an oligo with another molecule or particular surface.	Amino modifiers, Biotin, Thiol, Alkynes	DNA arrays, solid-phase PCR, NGS
Fluorophores and dark quenchers	Fluorescent dyes re-emit light upon excitation while dark quenchers absorb the emitted light and release heat.	Fluorescein Dyes, Cy Dyes, Rhodamine Dyes, ATTO dyes, Alexa Dyes, LI-COR Dyes, Iowa Black Quenchers, Black Hole Quenchers	qPCR, dPCR, for gene expression or genotyping
Freedom dyes	Have no patent licensing restrictions.	FAM, SUN, Cy 5	qPCR, dPCR, for gene expression or genotyping
Modified bases	A variety of modifications that can serve a range of functions, including cross-linking, duplex stabilization, and nuclease resistance.	Affinity Plus: +A, +G, +C, +T O-Meethyl: mA, mG, mC, mU RNA: rA, rG, rC, rU	qPCR, dPCR, antisense Pending the modification can be used to adjust T _m , increase resistance to nuclease degradation, reduce toxicity/limit unwanted immune responses
Phosphorylation	Use if your oligo is being used as a substrate for DNA ligase. 3' phosphorylation will inhibit degradation by some 3' exonucleases and can be used to block extension by DNA polymerase.	5' or 3' Phos	qPCR, dPCR for genotyping, Synthetic biology applications, NGS
Spacers	Create distance between a functional moiety and the hybridizing region of your oligo.	C3 Spacer, Spacer 18, Hexanediol	qPCR, dPCR for genotyping, Synthetic biology applications, molecular applications where bulky mods are attached to oligos (like Cholesterol)
Phosphorothioate bonds	Include these bonds in your oligo sequence for increased inter-nucleotide resistance to nuclease degradation. These modified bonds are especially beneficial when incorporated in to antisense oligos.	*A, *G, *C, *T	Antisense, FISH probes, and other cellular mapping



Custom Formulations

IDT offers a wide range of catalog and custom services to make the intake of your product easier. Find options on our website or request a custom quote. Options include custom normalization in tubes or plates, aliquots or replicate plates, pools of multiple oligos, duplexes, and custom kitting and packaging.



Purifications

Add purification to increase success in demanding applications such as multiplex PCR, cloning, mutagenesis, or antisense/RNAi methods. Purification services offered include **PAGE and various types of HPLC**.

Quality Control

Our priority is to provide you with the highest quality oligos that we can deliver. In addition to free electrospray ionization (ESI) mass spectrometry analysis that is provided as standard with every oligo*, we offer optional QC services to suit your particular product needs. Purified oligos up to 60 bases that are provided with a purity guarantee receive QC by capillary electrophoresis (CE).

Don't see what you need on our website? Contact us!

For more information, visit www.idtdna.com/Oligos



For Research Use Only. Not for diagnostic procedures. Unless otherwise agreed to in writing, IDT does not intend these products to be used in clinical applications and does not warrant their fitness or suitability for any clinical diagnostic use. Purchaser is solely responsible for all decisions regarding the use of these products and any associated regulatory or legal obligations.

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