CRISPR nucleases:

Recombinant, high-purity Cas9 and Cas12a (Cpf1) endonucleases for genome editing experiments.

Oligo modifications:

Unmatched wide variety of modifications can be incorporated at OR after the time of synthesis.

CRISPR custom guide RNAs:

Custom guide RNAs ideal for prime editing (pegRNA) projects, CRISPR-Cas13 applications, and most alternative CRISPR-Cas systems.

Hybridization Capture thybridization capture products includes a virely of predesigned panels and custom panel available a range of panel sizes.

GMP oligos:

Customized products and services to meet the rigorous quality requirements for clinical and molecular diagnostic applications.

Custom DNA oligos:

Single-stranded and duplexed DNA sequences, manufactured to your specifications.



Custom gene synthesis:

Complete synthetic genes with 100% sequence verification are provided in a plasmid cloning vector and ready to use in a variety of applications.

Inventoried oligos:

Stocked oligonucleotides for sample preparation, sequencing, and gene expression analysis quality controlled by mass spectrometry and capillary electrophoresis.

Genome editing detection:

T7 endonuclease I (T7EI) mismatch cleavage assay for detection of on-target editing, known off-target events, and estimation of genome editing efficiency in cultured cells.





The company strives to achieve this by improving nucleic acid synthesis technology and developing new applications for the use of DNA- and RNA-based compounds. IDT's advanced synthesis group combines expertise in chemistry, molecular biology, and engineering to produce and purify complex nucleic acids of all kinds.

TO KNOW MORE, CALL US

+ 91 124 4559 800 - 99 email us : info@imperialls.com

Product Category

DNA/RNA oligos

Custom DNA/RNA oligos Ultramer DNA/RNA oligos Oligo modifications Antisense oligos

xGen™ Next Generation Sequencing

Library Preparation **Hybridization Capture Amplicon Sequencing** Library Normalization Custom/ Pre designed Hyb Panels

Primers and Probes

Custom Probes Custom primers Genotyping Mutation detection miRNA inhibitors

CRISPR Genome Editing

CRISPR-Cas9 CRISPR-Cas12a (Cpf1) Custom guide RNAs

Why IDT

Manage cost per reaction with affordable pricing.

Meet your assay needs with flexible probe and primer configurations.

Complete confidence in oligos that are verified by ESI-mass spectrometry.

Unrivaled control of oligo specifications with custom formulation.

Benefit from the latest improvements in on- and off-target design and chemical modifications, as well as easy Ordering of custom or predesigned guide RNAs.

Precisely control editing with efficient delivery of the RNP by lipofection or electroporation.

Ligation-based and PCR-based indexing solutions.

Comprehensive offering of high purity adapters and primers.

Generate the highest level of performance with greater than 99.5% call accuracy for over 90% of assays tested.

Validate markers affordably using the smallest pack size commercially available.

Ensure confidence in your data with gBlocks Gene Fragments as control templates.

Purified oligos up to 60 bases with a purity guarantee receive QC by capillary electrophoresis (CE).

Offer dual HPLC purification or dual PAGE and HPLC for applications that demand the utmost in oligo purity.



CRISPR genome editing

(I) Genome editing with CRISPR-Cas9 CRISPR-Cas9 gRNA Guide RNAs (gRNAs) contain the target-specific sequence for guiding Cas9 protein to a genomic location. We offer 3 gRNA formats: crRNA:tracrRNA duplex, crRNA XT:tracrRNA duplex, and single guide RNA (sqRNA). (i)CRISPR-Cas9 crRNA Alt-R® CRISPR-Cas9 crRNA, 2 nmol Alt-R® CRISPR-Cas9 crRNA 10 nmol Alt-R® CRISPR-Cas9 crRNA, 2 nmol. Plate Products Alt.Dift CDISDD,Cord orDNA 10 nmol Dista Alt-Dis CRISDR-Card or DNA 50 nmol Alt-R® CRISPR-Cas9 crRNA, 100 nmol (ii) CRISPR-Cas9 crRNA XT Alt-R® CRISPR-Cas9 crRNA XT, 2 nmol Alt-R® CRISPR-Cas9 crRNA XT, 10 nmol Products Alt-R® CRISPR-Cas9 crRNA XT. 2 nmol. Plate Alt-R® CRISPR-Cas9 crRNA XT. 10 nmol. Plate (iii) CRISPR-Cas9 sqRNA Alt-R® CRISPR-Cas9 sqRNA, 2 nmol Alt-R® CRISPR-Cas9 sgRNA, 10 nmol Alt-R CRISPR-Cas9 sgRNA, 50 nmol Alt-R CRISPR-Cas9 sgRNA, 100 nmo Custom Alt-R CRISPR sqRNA (II) CRISPR-Cas12a (Cpf1) genome editing The Alt-R CRISPR-Cas12a System allows targeting of alternative sites that are not available to the CRISPR-Cas9 System and produces a staggered cut with a 5' overhang. (i) CRISPR-Car12a crPNA Alt-R® A.s. Cas12a crRNA, 2 nmol Alt-R® A.s. Cas12a crRNA, 10 nmo Alt-R® L.b. Cas12a crRNA, 2 nmol Alt-R® L.b. Cas12a crRNA, 10 nmol Products Alt-R® A.s. Cas12a crRNA, 2 nmol, Plate Alt-R® A.s. Cas12a crRNA, 10 nmol, Plate Alt-R® L.b. Cas12a crRNA, 10 nmol. Plate Alt-R® L.b. Cas12a crRNA. 2 nmol. Plate



Ouick, accurate, comes with labels and all calculations.

Customisation from IDT

CRISPR Custom Guide RNAs

Offer chemically synthesized and modified custom guide RNAs for common as well as exotic research applications. Alt-R Custom Guide RNAs are ideal for prime editing (pegRNA) projects, CRISPR-Cas13 applications, and most alternative CRISPR-Cas systems.

> Guide RNA length 30 - 59 bases Guide RNA length 60 - 79 bases

Guide RNA length 80 - 109 bases Guide RNA length 110 - 150 bases

Custom gene synthesis

Complete synthetic genes with 100% sequence verification are provided

in a plasmid cloning vector and ready to use in a variety of applications.

MiniGene 25-500 bp

Gene 501-1500 bp Gene 1501-3000 bp

> Gene 3001-5000 bp Gene 5001+ bp

Custom aPCR probes

Designed and production quality Para mounted to minimize robust signal -to-noise performance. HPLC purified to ensure removal of free residual dye and truncated synthesis products.

PrimeTime qPCR Probes

Affinity Plus qPCR Probes PrimeTime LNA® qPCR Probes Offers

Molecular beacon probes

MGB (minor groove binder) Eclipse® Probes

Other probes manufactured to GMP standards

Custom primers

The accuracy of design and synthesis of a primer pair is the most important consideration to generate good PCR performance data. Poor design choices, erroneous or truncated sequences, and ineffective purification can lead to unusable results.

rhPCR primers (for RNase H-dependent PCR) Offers

RxnReady® Primer Pools GMP and OEM services Modifications

Design tools

