

OLIGONUCLEOTIDE SYNTHESIS

India's leading Oligosynthesis provider is now offering its services globally.





We generate Long Mer DNA Oligonucleotides using proprietary synthesis methods which deliver high-quality Oligos up to 150 bases. They are available singly or as double-stranded and can be delivered in tubes or plates.



Reduce barcode crosstalk in your multiplexed NGS experiments. NGS Grade Oligos are manufactured by proprietary methods that are proven to reduce index cross-talk and increase the success of multiplex NGS experiments.

Bioserve India, a part of the REPROCELL group of companies, is the pioneer for Oligonucleotide synthesis in India. Since its inception, Bioserve delivers the highest quality products to match the researcher's needs. We offer a complete line of custom Oligonucleotide synthesis and purification services based on customer requirements. We facilitate the synthesis of Oligonucleotides with the help of High-throughput automated machines.

The ancillary reagents used for the synthesis are tested and approved before use in production to avoid low-quality parameters. The synthesis process is optimized and automated to meet the stringent requirements of quality level. Moreover, we work according to GMP procedures, providing full traceability with extensive batch production records.



BioServe offers wide variety of single & multiple modifications for DNA Oligonucleotides.

- Fluorescent Labelled
- Non-Fluorescent Labelled
- Standard Modifications
- q-PCR Probes



Universal primers are complementary to nucleotide sequences used for the amplification of a very similar gene that related to a specific genus. It binds to a wide variety of DNA templates.

We provide exceptional quality Oligonucleotides which enables you to succeed in your experiments

- Oligos are synthesized on 10, 20, 25, 50, 100, 200 and 1000 nmole scales.
- Other quantities available on request. All the oligos are desalted & lyophilized.
- Increase your quality based on your experimental needs. We offer wide range of purification techniques.
- We follow stringent synthesis and QC parameters to provide quality product to our customers.

Bioserve India has been a leader in nucleic acid technology since 2002. Our expertise in nucleic acid chemistry has enabled us to provide our clients with extensive selection of dyes, quenchers, modified bases, linkers, spacers, and other related conjugates.

Choose the right Scale and Purification

| Type of purification | Length | 5-35 | 5-35 | 5-50 | 5-100 | 5-120 | 5-150 |
|----------------------|---------------|------|------|------|-------|-------|-------|
| | Scale (nmole) | 10 | 20 | 50 | 100 | 200 | 1000 |
| Desalted | OD @ 260 nm | 5-7 | 7-8 | 8-10 | 15-20 | 21-25 | 30-35 |
| OPC | OD @ 260 nm | 1-3 | 2-4 | 2-5 | 5-8 | 8-12 | 12-15 |
| HPLC | OD @ 260 nm | | | 1-4 | 2-5 | 8-10 | 10-12 |
| PAGE | OD @ 260 nm | | | 1-3 | 3-5 | 5-7 | 7-10 |



Standard Modifications

| Modifications | Labeling position | | | | | |
|-----------------|-------------------|-----|----------|--|--|--|
| | 5′ | Int | 3' | | | |
| Biotin | ✓ | _ | ✓ | | | |
| Inosine | ✓ | ✓ | - | | | |
| Amino | ✓ | _ | 1 | | | |
| Phosphorylation | ✓ | _ | ✓ | | | |
| Thiol | ✓ | _ | ✓ | | | |

Quenchers

| 5' Label | 3' Label | | | | |
|----------|--------------|--|--|--|--|
| FAM | BHQ-1 | | | | |
| TET | BHQ-1 | | | | |
| HEX | BHQ-1 | | | | |
| TAMRA | BHQ-1, BHQ-2 | | | | |
| CY5 | BHQ-2 | | | | |
| CY3 | BHQ-1 | | | | |

Fluorescent Dyes

| | | | | | Labeling Position | | | Purification Option | | | |
|--------------------|-----|-----|----------------|------------------|-------------------|-----|------------|---------------------|----------|------|-----------------------|
| Fluorescent Dye | Abs | Em | Ext. Coeff. | MW | 5' | Int | 3' | HPSF | HPLC | PAGE | Alternative to |
| TET | 521 | 5-7 | 73 | 612.30 | √ | - | <i>J</i> - | - | √ | - | CAL Fluor Gold 540 |
| HEX | 536 | 1-3 | 73 | 681.20 | ✓ | _ | _ | _ | √ | 7 | CAL Fluor 560 SIMA |
| CY3 | 552 | 570 | 150 | 444.60 | ✓ | _ | _ | | ✓ | | TYE 563 |
| CY5 | 649 | 670 | 250 | 470.63 | ✓ | _ | _ | _ | ✓ | _ | TYE 655 |
| TAMRA | 544 | 576 | 90 | 512.58 612.70 | √ | _ | √ | _ | ✓ | _ | |
| FAM | 495 | 520 | 83 | 474.50 | ✓ | _ | ✓ | | ✓ | _ | ATTO 495 |

Details of Activity Report

- OD Units
- Oligo concentrations in picomoles, nanomoles and micrograms
- Melting Temperature (Tm) of the Oligo
- Total Yield

- GC Percentage
- Molecular Weight
- Reconstitution volume to get the $100\mu M$ concentration

Ordering Oligos Made Easy

- Visit https://www.reprocell.com/oligonucleotidesynthesis and download our Oligo Order Form (an Excel spreadsheet).
- You can use the form on that webpage to upload your order form, and/or to ask us any questions
- Alternatively, send your request to Bioserve India (part of the REPROCELL Group) at oligodept@reprocell.com and attach your Oligo Order Form
- We will send you an email confirmation for your order and an estimate date of completion.
- When your product is ready, we will send you another email with your **Activity Report** (data sheet) and we will ship to you your product with a print copy of the Activity Report.



Bioserve India's Other Services

Providing genomic analysis needed by scientists to make breakthroughs in research, drug discovery and molecular diagnostics.











DNA Barcoding





Bioserve Biotechnologies (India) Pvt Ltd

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