

WORLD OF IBA OLIGOS

HIGH QUALITY DNA AND RNA CUSTOM SERVICES



20 *Years*
quality, expertise
and innovation

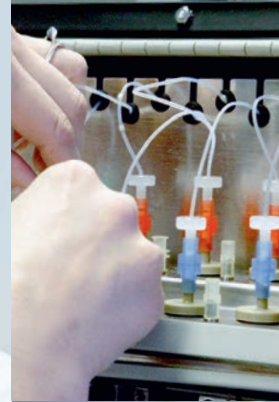
FLUORESCENT LABELS

NON-FLUORESCENT MODIFICATIONS

BACKBONE MODIFICATIONS

A GERMAN LEADER IN THE SYNTHESIS OF SPECIAL NUCLEIC ACIDS SINCE 1991

IBA produces specialized, modified and labor-intensive nucleic acid products. Our highly motivated and qualified team not only has special expertise in DNA and RNA modification and labeling, but our in-house nucleoside and nucleotide chemistry laboratory continuously develops new modifications, not available elsewhere.



You ask for it –
we synthesize it!
Just tell us
what you need.

Chimeric oligos

all combinations of:

- DNA
- RNA
- 2'-O-Methyl-RNA
- 2'-Fluoro-RNA
- 2'-Amino-RNA



WE PROVIDE

DNA

- Standard DNA oligonucleotides
- Long range up to 200 bases*
- Large scale oligonucleotides
- 3'-, 5'- or internally modified

RNA

- dsRNA, siRNA, miRNA, random RNA
- Long range up to 100 bases*
- 3'-, 5'- or internally modified
- 2'-modified: -O-Me, -F, -NH₂
- Nucleoside Triphosphates
- RNA and RNA/DNA hybrid dinucleotides

*depending on sequence and scale

“We were always fully satisfied with the exceptional quality, purity and reliability of the amount of unlabeled and labeled oligonucleotides, as well as with the customer support provided by IBA.”

*Prof. Dr. Markus Sauer, Biotechnology & Biophysics,
University of Wuerzburg, Germany.*



FLUORESCENT LABELS

- For dual and multiply labeled DNA and RNA
- More than 200 labels to choose from
- Covering the entire spectrum from ultraviolet to infrared
- Stokes shifts up to 180 nm
- Licensed supplier of oligos labeled with Alexa Fluor® (Molecular Probes, owned by life technologies)
- Alternative dyes from Atto-Tec, Luminartis, Abberior, Dyomics and BaseClick
- Quenchers such as BBQ and BHQ®
- Excellent high quality and competitive prices
- e.g. for FRET, qPCR, FCS/FCCS, confocal and STED microscopy, single-molecule imaging, multi-color DNA and RNA FISH, DNA Origami

Fluorescent labels

- › Atto
- › Alexa Fluor®
- › Cyanine
- › Dy
- › FAM
- › TET
- › JOE
- › Eterneon™
- › Abberior®
- › Chromeo®
- › BHQ®/BBO quenchers and many more!

CLICK'N'PLAY



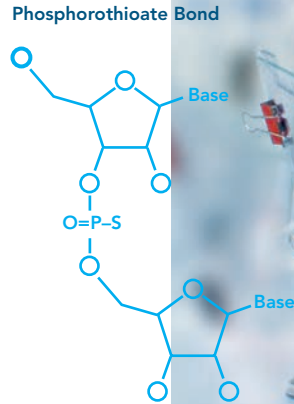
Request a poster with our available fluorescent labels at oligobrochure@iba-lifesciences.com

NEW FOR MULTI-COLOR APPLICATIONS!

We synthesize oligos using the **Click-Chemistry**, allowing completely new dye combinations not previously available and at so far unreachable labeling densities.

NON-FLUORESCENT MODIFICATIONS

- More than 80 internal, 5'- and 3'- DNA and RNA modifications to choose from
- Including Biotin, Iminobiotin, Desthiobiotin and Digoxigenin
- For DNA microarrays
- Surface binding and hybridization experiments
- Cross-linking and crystallography studies
- And more!



Request a brochure with our available non-fluorescent modifications at oligobrochure@iba-lifesciences.com

BACKBONE MODIFICATIONS

PHOSPHOROTHIOATES

For antisense applications, we offer the nuclease-resistant Phosphorothioates (PTOs) for DNA and RNA. Introduced at either the 5'- or 3'-end of an oligo, Phosphorothioates can inhibit exonuclease degradation. If they are introduced internally, they can limit attacks by endonucleases.

Non-fluorescent modifications

- › Bromo
- › Amino
- › Deaza
- › Carboxyl
- › Phosphate
- › Psoralen
- › Biotin
- › Desthiobiotin
- › Digoxigenin
- › Methyl
- › Glycol
- › HEGL
- › Thiol
- › DBCO
- › Spacers
- › Iminobiotin and many more!

APTAMERS – AN ALTERNATIVE TO ANTIBODIES

With our expertise in high quality oligonucleotide synthesis we offer custom synthesis of DNA as well as RNA aptamers, depending on your needs.

Due to their specificity, high affinity, low immunogenicity and ease of use, aptamers have been widely used in the medical and industrial fields of disease therapy, cell therapy, drug delivery, drug discovery, diagnostics, biosensors and bioimaging.

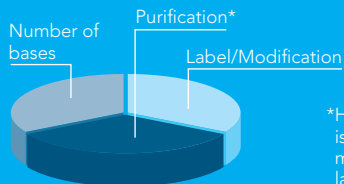
“When we started to work with aptamers, a collaborator recommended IBA for RNA synthesis and modification. Ever since we have been completely satisfied with IBA’s RNA and aptamer quality and appreciate the company’s excellent customer service.”

*C.F.M. Sier, Oncologic Surgery, Leiden University Medical Center,
The Netherlands*



Hit your target
with DNA or RNA
aptamers!

Price assembly



*HPLC is included for modified/ labeled DNA

4 STEPS TO ORDER YOUR OLIGO

- 1 Choose your scale
- 2 List sequence 5' to 3'
- 3 Indicate modification type and position
- 4 Select purification method

Ready to go!

Scales available and typical yields

Typical yields of an unmodified 20mer* (DNA and RNA)

Synthesis scale	Molecular Biology Grade	After HPLC
0.01 μmol	2–3 nmol	1–2 nmol
0.05 μmol	10–15 nmol	5–8 nmol
0.20 μmol	30–50 nmol	25–40 nmol
1.00 μmol	120–200 nmol	100–150 nmol
10.00 μmol	1,000–1,500 nmol	600–1,000 nmol
15.00 μmol	2,000–3,500 nmol	1,500–3,000 nmol

*with equal base composition



Oligo-Shop www.oligo-specialist.com
E-Mail Orders oligoorder@iba-lifesciences.com

