



Specialty Reagents & Products for DNA Synthesis

The Secret of Success in DNA Synthesis



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**BIOSEARCH
TECHNOLOGIES**

Advancing Nucleic Acid TechnologySM

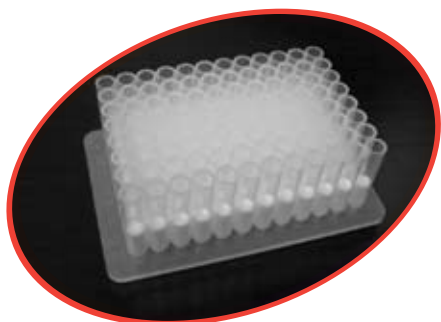
Columns & Supports



SuperColumn DNA Synthesis Columns



Standard DNA Synthesis Columns



SuperPure Plus Purification Columns



MicroSync II Post-Synthesis Platform

SuperColumn™ - DNA Synthesis Columns

SuperColumn DNA synthesis columns are designed for use on a variety of commercially available DNA synthesizers (ABI 3900™, MerMade™, etc.). They have an upper pipette fitting and a lower luer fitting, are packed with 500 Å, 1000 Å, 1400 Å, or 2000 Å CPG, and are available filled with any of our CPGs for 50 and 200 nmol synthesis. Coupled with our MicroSync II™ system, 96 columns can be effortlessly deprotected and cleaved after synthesis.

Standard DNA Synthesis Columns

Standard synthesis columns can be used on the ABI 394™, Expedite™, Biosearch 8700 and any other luer-luer connected synthesizers. Columns are packed with 500 Å, 1000 Å, 1400 Å and 2000 Å CPGs and are available for 50, 200, 1000, 1500, and 3000 nmol synthesis scales. Nucleosides are linked by standard 3'- succinate linkage.

Specialty Synthesis Columns & Supports

In addition to standard supports, Biosearch also offers columns packed with various specialty CPGs: Universal, amino modifying, Q-Linker, fast deprotecting, spacer CPGs, and biotinylating, inverse linkage, and phosphorylating supports. We also offer a variety of RNA and 2'-O-Me synthesis columns and supports.

Purification Cartridges & Accessories

SuperPure™ Purification Columns

Our SuperPure (≤ 50 nmol scale) and SuperPure Plus (≥ 200 nmol scale) columns are packed with a hydrophobic polymer resin for reverse-phase purification of 5'- DMT-protected oligos. Our SuperPure columns all have luer bases and are fully compatible with the Micro-Sync II system.

MicroSync™ II Post-Synthesis Work-up Platform

A high-throughput, vacuum-based, parallel processing system that permits the simultaneous, on-column, post-synthesis work-up of up to 96 synthetic oligos per platform. It is resistant to most organic solvents, ideal for integration with automated robotic processing platforms, and is a great time and effort saver when used with our SuperColumn synthesis columns and SuperPure purification columns.

Abs and Em λ_{max} for Proprietary Reporter Dyes

CAL Fluor® Dyes: Replacements for TET, VIC, HEX, JOE, TAMRA, Texas Red™, LightCycler® Red 640, ROX

Dye	Abs λ_{max} / Em λ_{max}
CAL Fluor Gold 540	522 / 543 nm
CAL Fluor Orange 560	537 / 558 nm
CAL Fluor Red 590	569 / 591 nm
CAL Fluor Red 610	590 / 610 nm
CAL Fluor Red 635	616 / 637 nm

Quasar Dyes®: Replacements for Cy3, Cy5, Cy5.5

Dye	Abs λ_{max} / Em λ_{max}
Quasar 570	547 / 570 nm
Quasar 670	644 / 670 nm
Quasar 705	690 / 705 nm

Pulsar 650® Dye: For LightCycler and qPCR Systems

Dye	Abs λ_{max} / Em λ_{max}
Pulsar 650	460 / 650 nm

Quenching Ranges for Proprietary Quencher Dyes

Black Hole Quencher Dyes
BHQ-0: 430-520 nm
BHQ-1: 480-580 nm
BHQ-2: 560-670 nm
BHQ-3: 620-730 nm

Volume Discounts & Bulk Sales

One of the benefits of being a primary manufacturer is our ability to offer significant volume and standing order discounts on most of our products. We are also able to supply bulk quantities of most items at reduced cost. Please contact your sales representative for further information: valerie@biosearchtech.com

3', 5' and Internal Modification Reagents

Black Hole Quencher® Dyes

Our family of BHQ® dyes are true dark quenchers and replace TAMRA and dabcyI in FRET applications. They effectively quench fluorophores emitting anywhere in the visible and into the near-IR portion of the electromagnetic spectrum. BHQ dyes are available linked to CPG in synthesis columns, and as amidites (with or without DMT) for internal and 5'-DNA labeling.

Amidites, Esters & Other Modifiers

For special synthesis applications, Biosearch also offers a number of fluorophore amidites, esters and free acids. We supply a variety of 5' amino, internal amino, 5' phosphorylating and thiol modifiers, and biotin and hapten modifiers for 3' or 5' modification.

Fluorescent Reporters & Quenchers

Biosearch offers our own proprietary reporters; the CAL Fluor®, Quasar® and Pulsar® dyes. Most of these dyes are available linked to CPG, as amidites or as succinimidyl esters. All fluorophores and fluor-modified CPGs are manufactured on-site by Biosearch and are used routinely by our own Custom DNA Synthesis Group. Biosearch also offers a variety of standard reporters and quenchers: FAM, TET, HEX, TAMRA, ROX, and dabcyI.

Spacer Amidites & Spacer CPGs

For the incorporation of spacer arms into oligonucleotides, we offer C3 & C6 spacer amidites (aliphatic linker), Spacer 9, 18 amidites (PEG-based linker) and C2, C3, C6 and C16 spacer CPG supports.

Biosearch Facilities and Capabilities

Biosearch Technologies, Inc. is a vertically integrated, closely held California corporation, located in Novato California. We are a ISO 9001:2000 certified and GMP compliant biotechnology company with over 70 employees and 60,000 square feet of modern lab and office space. Dedication to quality overlays every step of the manufacturing process: from in-bound materials QC to exhaustive finished product QA to providing extensive lot records and product documentation to final packaging and shipment. We are fully committed to quality.

For over 25 years Biosearch has been a driving force in the manufacture of high quality specialty reagents for DNA synthesis. Synthesized on site in our state-of-the-art chemical manufacturing facility, you're assured unbeatable quality because every bulk reagent we sell is used in our own commercial DNA synthesis facility. Being our own most demanding customer assures you of receiving the highest quality products available.

If you are looking to source bulk specialty DNA synthesis reagents at unbeatable prices without sacrificing quality, come to Biosearch. We'll show you why so many corporate, government and academic clients choose Biosearch as their preferred vendor! They can depend on Biosearch every time, all the time.

Our Mission

Biosearch Technologies commits itself to perfecting the design and manufacture of innovative nucleic acid based products crucial to the discovery and application of genomic information. We strive for the highest levels of product quality and customer satisfaction in the diverse markets to which we cater world-wide.

Technical Support

If you require additional information or technical assistance or simply want to let us know how we're doing, please feel free to email our Technical Support group at: techsupport@biosearchtech.com. For immediate assistance, our knowledgeable staff is available for telephone consultation from 8:00 AM to 5:00 PM, Monday through Friday, U.S. Pacific Coast time. Please contact us at:

1.800.GENOME.1 (436.6631) U.S./Canada only
+1.415.883.8400 telephone +1.415.883.8488 fax

Sales Support

You can reach your DNA synthesis reagents sales representative today at valerie@biosearchtech.com, or send an email to our customer service group at info@biosearchtech.com for a competitive price quotation.



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The Black Hole Quencher dye technology is protected by U.S. patents and continuations numbered 7,019,129, 7,019,129 B1 and 7,019,312 B2, and the CAL Fluor dye technology is protected by U.S. Patent 7,344,701 issued to Biosearch Technologies, Inc. The Quasar dye technology is covered by U.S.P.T.O. patent application number US2005/0214833A1. The Pulsar dye technology is covered by U.S.P.T.O. patent application US2004/0146895A1.

Black Hole Quencher, CAL Fluor, Quasar and Pulsar dyes for incorporation into dual-labeled fluorogenic probes are available only through Biosearch Technologies, Inc. and selected licensed vendors. ABI 394, ABI 3900 and Expedite are trademarks of Applied Biosystems, Foster City, California. MerMade is a trademark of BioAutomation Corp. of Plano, Texas. Q Linker support is sold under license from University Technologies, Inc.