Migrate to Monarch®.

Environmentally-friendly Nucleic Acid Purification Kits from New England Biolabs

Want to feel good about your choice in DNA purification? With our fast and reliable Monarch Nucleic Acid Purification Kits, you can achieve optimal purification while creating less waste. Available for plasmid minipreps, DNA gel extraction and enzymatic cleanup (including PCR), our products use up to 44% less plastic and are packaged using responsibly-sourced, recyclable materials. Make the change and migrate to Monarch today.

These kits might be the best I have used for the price. The best part is that it uses less plastic for production!! Thank you for caring about our environmental impacts, NEB!!!

– NEB customer

Request your free sample at www.NEBMonarch.com
Finally, a complete, one-buffer system—for beautifully simple cloning

Introducing the Invitrogen™ Anza™ Restriction Enzyme Cloning System:

• One buffer for all restriction enzymes
• One digestion protocol for all DNA types
• Complete digestion in 15 minutes
• Overnight digestion without star activity

Choose simplicity at thermofisher.com/Anza

For Research Use Only. Not for use in diagnostic procedures. © 2015 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. CO126010 0815
Industrial Overview of Chancheng

“Made in Foshan” has been prestigious in China as well as all over the world, and Foshan has also become the ‘City of Brands’ with the highest investment potential. Chancheng District has promoted the urban development by persisting in optimizing the secondary industry and developing the tertiary industry as well as objective-oriented development and industrial aggregation. Therefore, Chancheng economic strength has been consistently increasing and its modernization of the industrial system has been accomplished. In 2015, Chancheng’s gross domestic product (GDP) reached 146.90 billion RMB, the secondary industry GDP was 67.45 billion RMB, the third industry GDP was 78.41 billion RMB.

European Industrial Park  
New Media Industrial Park  
South China Transportation and Electrics Industrial Park

CHUANGZHI CHANCHENG

Upgrade of Traditional Advantageous Industries

The four major traditional industries in Chancheng District with considerable scale are ceramics, stainless steel, textile and garments, and sauce and dressing. In recent years, by extending the industry chain, these industries have gradually transformed its emphasis from manufacturing and production to R&D, advanced manufacturing, sales and trading, brand establishment, and headquarter economy. Intelligent manufacturing, green technologies, healthcare and advanced equipment manufacturing are developed as the four core industries of the district.
Competitive Development of Modern Service Industry

The high-end service industry in Chancheng District has also developed rapidly with significant improvements, its weightage in GDP has been consistently increasing. Other sunrise industries are also flourishing, including culture innovation, public service, technology and finance, and community service. Various modern service clusters have also been formed here, for example, Foshan Zumiao Retail and Tourism Center, Oriental Plaza Shopping and Recreational Zone, Jihua Commercial Belt and Foshan Qicha Innovation Industrial Park.

Lingnan World  Smart New Town  South China Innovation Valley

Rapid Growth of Sunrise Industries

The strategic sunrise industries including new IT, intelligent manufacturing, healthcare, and green technology have developed rapidly. There are State-level High-tech Industrial Development Zone Chancheng Park, Chancheng Economic Development Zone, Foshan High-tech Science and Technology Industrial Park, Guangdong (Foshan)Software Industrial Park, Foshan New Media Industrial Park, Smart New Town, Foshan Furniture E-commerce Innovation Zone, etc. In 2015, the gross production of high-tech manufacturing industry yield 23.226 billion RMB, with a growth rate of 2% with reference to the previous year.

Foshan Creativity Park  Foshan Life Science Park  Foshan Furniture E-commerce Innovation Zone
Looking to add more to your transcriptome analysis?

Complete the picture with RNAscope® in situ hybridization.

Visualize expression for virtually any gene in any tissue from any species

Elevate your genome and transcriptome analysis by adding morphological context with gene expression data. RNAscope® in situ hybridization technology delivers unrivaled single-molecule sensitivity and specificity—with the flexibility to analyze virtually ANY gene target in ANY tissue. Same-day results and automated assays mean you can validate or add your NGS data quickly, easily, and all backed by our performance guarantee.

Learn more at acdbio.com/applications

Enabling Research, Drug Development & Diagnostics

For Research Use Only. Not for diagnostic use. RNAscope is a registered trademark of Advanced Cell Diagnostics, Inc. in the United States or other countries. All rights reserved. ©2016 Advanced Cell Diagnostics, Inc. Doc #: MK 51-067/112916
Unbound macromolecule analysis. Unlimited research potential. Unleash your ingenuity.

Unsurprisingly, it’s all possible with the Optima AUC.

The new Optima AUC is a faster, more sophisticated, and easy-to-use analytical research tool for your macromolecule research. With precise absorbance scans in <7 seconds/sector,* and interference scans in <5 seconds/scan, the Optima AUC gives you the fastest data acquisition rate yet. Remote data export provides unmatched convenience for analyzing your data.

By analyzing proteins as interacting elements instead of in isolation, AUC more closely approximates true physiological conditions by considering:

• The protein’s conformation (folded or unfolded)
• Assembly reversibility (interacting systems)
• Stoichiometry (associative state)
• Heterogeneity (aggregation)

Undecided? Visit info.beckmancoulter.com/optimaauc to learn more.

* At Optimal rotor speeds, at 10 μm radial resolution
RNA BIOLOGY
11th Annual Salk/Fondation Ipsen/Science Symposium on Biological Complexity
January 25 - 27, 2017 • Salk Institute for Biological Studies, La Jolla, CA

RNA does a lot more than simply act as a messenger between our DNA and the ribosomes that make proteins. RNA plays a role in controlling which genes are turned on or off, a process that can have a profound impact on human health. This symposium is designed to learn more about the role of RNA in the biology of a cell, tissue, organ and a whole organism.

THE SYDNEY BRENNER NOBEL LECTURE
VENKATRAMAN “VENKI” RAMAKRISHNAN
MRC LABORATORY OF MOLECULAR BIOLOGY, UK

KEYNOTE LECTURE
JOAN STEITZ
YALE SCHOOL OF MEDICINE

SESSION 1: SMALL RNAs
GARY AKVINCI (Chair) MASSACHUSETTS GENERAL HOSPITAL
XUENEI CHEN UNIVERSITY OF CALIFORNIA, RIVERSIDE
ROBERT MARTIENSSEN COLD SPRING HARBOR LABORATORY
MICHAEL AXTELL PENN STATE UNIVERSITY

SESSION 2: LONG NONCODING RNAs
CARIOLINE BEAN (Chair) JOHNS HOPKINS UNIVERSITY, MD
HOWARD CHANG STANFORD UNIVERSITY SCHOOL OF MEDICINE
GENEVIEVE ALMOUZNI INSTITUT CURIE - CENTRE DE RECHERCHE, FRANCE
SHIV GREWAL NATIONAL INSTITUTES OF HEALTH

SESSION 3: STRUCTURE OF RNA
DINSHAW PATEL (Chair) MEMORIAL SLOAN-KETTERING CANCER CENTER
LEE MORGAN COLD SPRING HARBOR LABORATORY
KIYOSHI NAGAI KANAZAWA UNIVERSITY, JAPAN
ROBERT BATEY UNIVERSITY OF COLORADO BOULDER

SESSION 4: RNA MODIFICATION
FENG ZHANG (Chair) BROAD INSTITUTE OF MIT
SAMIE JAFFREY WEILL MEDICAL COLLEGE, CORNELL UNIVERSITY
WENDY GILBERT MASSACHUSETTS INSTITUTE OF TECHNOLOGY
DAVID LIU HARVARD UNIVERSITY

SPECIAL LECTURE
TOM GINGERAS COLD SPRING HARBOR LABORATORY

SESSION 5: mRNA BIOGENESIS
ROBERT H. SINGER (Chair) ALBERT EINSTEIN COLLEGE OF MEDICINE
BRENDA BASS UNIVERSITY OF UTAH
ROY PARKER UNIVERSITY OF COLORADO BOULDER
RACHEL GREEN JOHNS HOPKINS UNIVERSITY, MD

SESSION 6: RNA Disease/Therapeutics
PHIL SHARP (Chair) MASSACHUSETTS INSTITUTE OF TECHNOLOGY
SHU LIN LIU JANSSEN PHARMACEUTICALS, INC.

SPECIAL LECTURE
EMMANUELLE CHARPENTIER MAX PLANCK INSTITUTE FOR INFECTION BIOLOGY, GERMANY

GALA DINNER AND LECTURE
PAUL SCHIMMEL THE SCRIPPS RESEARCH INSTITUTE

ORGANIZING COMMITTEE: YVES CHRISTEN, JACQUELINE MERVINILL, INDER VERMA

SCIENTIFIC PROGRAM COMMITTEE: YVES CHRISTEN, JOSEPH ECKER, KEN EVANS, TONY HUNTER, GERALD JOYCE, JACQUELINE MERVINILL, BRETT MONA, AMY PASQUINELLI, TABI RANA, GUY RIDDING, ORLA SMITH, INDER VERMA (Chair), VALDA VINSTON

ONLINE REGISTRATION and INFORMATION: www.salk.edu/salkipssense2017 CONTACT: events@salk.edu

ABSTRACT SUBMISSION DEADLINE: November 30, 2016 REGISTRATION DEADLINE: January 6, 2017
Poster design by Jamie Simon, Salk Institute
**Genome Fragment Analyzer**

High-throughput genomic techniques require high-throughput instruments to measure the quality of input materials like DNA, genomic DNA (gDNA), and RNA. Advanced Analytical Technologies (AATI) designed the Fragment Analyzer INFINITY Capillary Electrophoresis System to meet this need in the workflow of automated laboratories. INFINITY is compatible with virtually any robotic arm, can run over 2,400 samples a day without intervention, and interfaces with laboratory information management systems to label samples automatically. It is also compatible with all of the original Fragment Analyzer qualitative and quantitative kits, which cover a wide range of nucleic acid sample types. To assess sample quality, AATI uses two kinds of metrics, or quality numbers: A fixed RNA quality number evaluates samples with consistent features like total RNA and correlates to the commonly used industry metric, while adaptive DNA and gDNA quality numbers have adjustable thresholds to appraise fragmented DNA and gDNA, which often vary widely between samples due to purification or shearing.

**Advanced Analytical Technologies**
For info: 515-964-8500
www.aati-us.com/product

**Profiling Panels**

NanoString Technologies offers nCounter Vantage 3D Panels, a portfolio of products that power our 3D Biology products for simultaneous analysis of DNA, RNA, and proteins. Up to 800 targets can be detected and quantified from the same sample, which opens the opportunity for multianalyte signature discovery and validation on a single platform, even for challenging FFPE samples. nCounter Vantage 3D products can be mixed and matched to customize panels for specific applications and research questions. Comprehensive data collection and uniform data output from nCounter Analysis Systems, including the new SPRINT Profiler, can help scientists identify novel biomarkers for translational and diagnostics research.

**NanoString Technologies**
For info: 888-358-6266
http://3d.nanosting.com

**Sequencing and Epigenetic Services**

With its comprehensive repertoire of services, Zymo Research makes genome-wide epigenetic analysis available to every researcher. All next-generation epigenetic sequencing is competitively priced and features state-of-the-art sample prep technologies and workflows as well as cutting-edge bioinformatics. We offer the most comprehensive services for 16S ribosomal RNA and shotgun sequencing from any sample type. Using the most advanced pipelines for sample collection, nucleic acid isolation, and library preparation, Zymo-BIOMICS allows for superior sequencing and analysis. The entire workflow is validated using the ZymoBIOMICS Microbial Community Standards, and provides non-biased community profile analysis. Tasks are customizable and can be combined to suit your needs, and include low-bioburden processing and accurate DNA/RNA isolation using the ZymoBIOMICS product line for the most accurate taxonomic profiling. Just send us your samples, and we will return the genome-wide analyses as customizable, publication-ready graphs and figures.

**Zymo Research**
For info: 888-882-9682
www.zymoresearch.com

**Transcriptome Profiling Assay**

Molecular characterization of patient-derived xenografts used in cancer research provides valuable information on oncogenic mechanisms, candidate drug targets, and pathway status. Driver-Map offers a novel, comprehensive end-to-end service portfolio for identifying differential gene expression, mapping clinically actionable mutations in RNA, detecting cellular composition (immune/stromal components), and profiling immunotherapy targets. The Driver-Map transcriptome profiling assay has the unique advantage of selectively profiling human genes in a background of mouse cells, as well as providing pathway status. Researchers can profile and characterize with Driver-Map to determine if xenograft/patient-derived xenograft models have captured and retained the molecular and biological heterogeneity of the disease. Driver-Map offers superior sensitivity to detect low-to-medium abundant genes, and provides reproducible and reliable data even from low amounts (10 ng) of RNA. No cross-reactivity of real-time PCR primers with mouse transcripts occurs, making this assay highly specific to human cells.

**Cellecta**
For info: 877-938-3910
www.cellecta.com

Electronically submit your new product description or product literature information! Go to www.sciencemag.org/about/new-products-section for more information.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and governmental organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by Science or AAAS of any products or materials mentioned is not implied. Additional information may be obtained from the manufacturer or supplier.
Located in Huangdao district, Qingdao, Shandong, China University of Petroleum (Huadong) is a national key university directly under the Ministry of Education. It is one of the key universities in the national "211 Project" Construction and the "Innovation Platforms of Preponderant Disciplines" and with a graduate school. Characterized with petroleum and petrochemical features and equipped with strong disciplines and beautiful environment, this university is the ideal hall for talents scholarship.

Shandong Normal University is located in Jinan which is a historical and cultural city of Shandong province. The school has developed into a comprehensive and advanced normal university and gained excellent social reputation with various subjects and majors, complete degree system, abundant teaching talents during the past 66 years. There are 25 departments, 83 undergraduate majors, 9 post-doctoral research institutes, 10 doctorate authorization First-Level Disciplines, 29 master's degree authorization First-Level Disciplines, 15 professional degree authorization centers and more than 42 training and research institutes at national and above-provincial level in Shandong Normal University. Now 3 dual academicians and over 60 state-level talents which includes the elites from National High-level Personnel of Special Support Program, the Recruitment Program of Global Experts, the national outstanding youth, Changjiang Scholars and 973 Chief Scientist, are employed by Shandong Normal University. In March 2014, the school was approved to be a jointly-funded universities by Shandong province and the Ministry of Education. Its WFC value (innovation index) ranks thirty-sixth of Chinese mainland universities in the British Nature Publishing Group’s latest ranking list.

Ludong University is located in the city of Yantai, one of the most charming cities in China. It is a key comprehensive provincial university with arts, sciences and engineering as its mainstay and coordinated multi-disciplinary development.

It has 22 colleges, a post-doctoral research station, a doctoral degree program, 77 master's degree programs, 81 undergraduate majors, and more than 30,000 students. With nine provincial key disciplines, six provincial key laboratories, three provincial humanities and social sciences research bases. Currently it has more than 1,400 full-time teachers, among whom more than 600 have a doctoral degree. Ludong University has 19 nation-level talents and 20 province-level talents. Another 13 academicians of Chinese Academy of Sciences (CAS) and Chinese Academy of Engineering (CAE) are employed as visiting professors.

Weifang University is a regular comprehensive university at provincial level offering full-time undergraduate programs authorized by Chinese Ministry of Education. It is located in Weifang, the World Kite Capital and national civilized city in Shandong Province. It serves as the educational training base for national special education and aims to become the Elite Higher Education Institute Cultivating Application-Oriented Talents for Shandong Province. Currently there are altogether 67 undergraduate specialties covering ten subject areas with over 25,600 full-time students. Covering an area of 2,100 mu (140 hectares), Weifang University has a faculty of 1,382 teachers. Among those 82 are doctoral and master degree tutors, and more than 50 are Top-notch Young Talent for the "Ten Thousand Talents Program" and experts receiving the State Council Allowance.


Please send your CV to consulent2@acadbridge.edu.cn
or call the direct line: +86 13810344600 (Wechat: Cchiang13)

www.edu.cn/sdzp
R&D Systems is Your New Trusted Source for Luminex® Instrumentation!

**Direct access** to Luminex staff for world-class on-site and 24x7x365 remote support

**Unlimited** emergency equipment repair

**Discounts** and special acquisition programs tailored to any lab’s budget

Learn more about Luminex® instruments | rndystems.com/luminexinstruments