

Oligo PRO™

Automated Purity Analyzers

ADVANCED ANALYTICAL Improving Process • Empowering Progress



OLIGO PRO™ AUTOMATED PURITY ANALYZERS

EMPLOYED BY WORLD-LEADING DNA/RNA MANUFACTURERS AND RESEARCH ORGANIZATIONS

Key Benefits

- > Perform 100% purity QC analysis
- > Verify probe quality prior to use in expensive, complex studies
- > Demonstrate product quality to increase value
- > Monitor synthesis performance
- > Provide differentiating QC capabilities in a competitive market
- > Analyze 24 (24HT) to 96 (96XT) different products in only 1 hour
- > Avoid shipment of nonconforming products and costly returns

Key Features

- > High separation resolution over an unsurpassed sizing range
- > High sample throughput with unattended operation
- > Direct UV quantification without dve labeling
- > Denaturing or native DNA/RNA separation methods
- > Easy to operate and maintain
- > Low cost per sample with minimal sample consumption
- > Advanced peak integration and data reporting capabilities

Two Platforms Tailored to Specific Needs

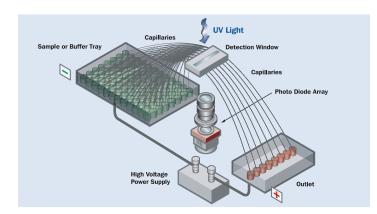
The *Oligo PRO*™ *96XT* is a 96-channel system for high throughput labs.

The *Oligo PRO™ 24HT* is a 24-channel system ideal for lower throughput labs.

AWARD-WINNING TECHNOLOGY* - UNIQUE, UNMATCHED CAPABILITIES

Advanced Analytical's *parallel* capillary gel electrophoresis-UV detection (CGE-UV) separation technology dramatically improves laboratory throughput and efficiency while minimizing sample consumption and reducing operational costs.

CGE-UV is a standard method for assessing oligo purity, providing high separation resolution and direct detection of DNA and RNA without the sequence and size dependent variations in response encountered in mass spectrometry or fluorescence-based methods.



^{*}Best Scientific Poster at TIDES 2005 Conference sponsored by BioProcess International.

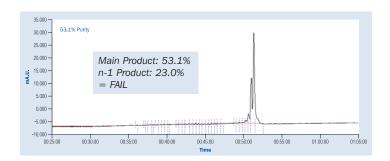
^{*}R&D Magazine's Top 100 Technologies for 2001.

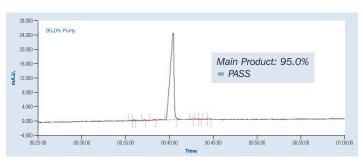
^{*}R&D Magazine's Most Promising New Technology Award 2001.

> ssDNA/ssRNA OLIGONUCLEOTIDE PURITY ANALYSIS

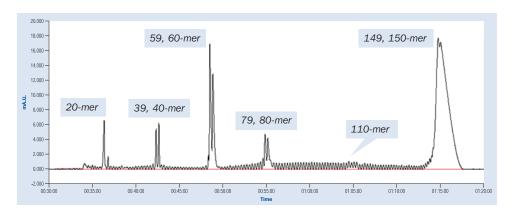
ACCURATELY ASSESS PURITY; ENSURE QUALITY PRODUCT

Custom oligonucleotide synthesis and purification is a complex, multi-step process. Final product quality is influenced by many factors that, while carefully monitored, cannot always be controlled. It is critical to both the end user and manufacturer of oligonucleotides that product purity be known and of the highest possible grade to ensure optimal performance and reduce ambiguous results.





Advanced Analytical's *Oligo PRO*™ systems provide high resolution, accurate purity assessments of oligonucleotide products with unsurpassed sample throughput and ease of use. Streamlined operation, ready-to-use reagents and dedicated software offer a complete solution for ensuring product quality.



Unsurpassed Sizing Range

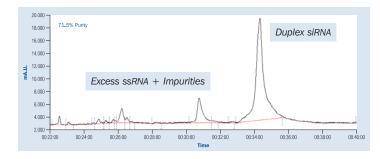
Patented Oligel® separation matrix enables single nucleotide resolution as high as 150-mer lengths under appropriate sample load.

> RNAI DUPLEX PRODUCT ANALYSIS

INCREASE CONFIDENCE FOR RNAI RESEARCH

Expensive RNAi duplex reagents deserve 100% purity testing. The quality of the final product can significantly affect RNAi response, and assessing that quality is critical to achieving overall success.

Advanced Analytical's *Oligo PRO*TM systems can be employed for the analysis of siRNA duplex purity and annealing efficiency. Compared with traditional methods such as PAGE, the *Oligo PRO*TM offers superior separation resolution, higher sample throughput, nanoliter sampling volumes, increased automation, and improved quantification.



Verify RNAi Duplex Quality

Single nucleotide resolution of ssRNA and separation of dsRNA duplex can be achieved across the size range of interest, as demonstrated in the above example.

> OLIGO PRO™ SYSTEM TECHNICAL SPECIFICATIONS

Sample Throughput: Oligo PRO™ 24HT

Analysis of 24 different 60-mer samples in 60 minutes

Oligo PRO™ 96XT

Analysis of 96 different 60-mer samples in 60 minutes

Detection: Online, fixed wavelength UV absorbance at 254 nm

Sample Injection: Simultaneous electrokinetic injection from a 96-well microplate

Sample Format: Desalted to maximize injection efficiency; $1-10 \mu M$ concentration range

Sample Volume Required: Typical volume 100 μ l/well (minimum volume 20 μ l/well)

Oligo Sizing Range: Up to 150-mer lengths under appropriate sample load

Software: Proprietary **Oligo PRO**™ software for system control/data analysis

Data Export Format: Microsoft® Word or PDF reports for individual samples or entire sample set

Environmental Conditions: Indoor use, normal laboratory environment; lab temperature 15–25° C

Relative Humidity Range: < 80% (non-condensing)

Electrical: 100–200 VAC; 50–60 Hz (200–230 VAC; 50–60 Hz available); 15 A

Instrument Dimensions: Fully configured requires 99.1 cm H x 243.8 cm W x 76.2 cm D

(39 x 96 x 30 in)

Instrument Weight: 88.6 kg (195 lbs)

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