



# **GA-3116**

# **Genetic Analyzer**



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

# **Analytical Technologies Limited**

An ISO 9001 Certified Company

www.analyticalgroup.net



Classic Series are developed upon Sanger Method, which could support both 6-color and 8 color fluorescence, and can be applied to gene sequencing and fragment analysis, therefore, it could attend the needs of basic research and clinical laboratory use. The Classic series gene analyzer is composed of capillary electrophoresis host, computer, matching consumables materials and reagents, as well as self-developed data acquisition and data analysis software. The data acquisition software provides a customizable operation interface, which can reflect running status of the instrument, the usage status of consumables materials and systematic maintenance in real time; The data analysis software consists of sequencing analysis software and fragment analysis software. The sequencing analysis software can be used for basecalling, sequencing data quality evaluation, mutation spot search, automatic deletion of low-quality data and other functions; The fragment analysis software can be used to analyze STR, SNP, AFLP, Fusion,

# Product Advantages

- Based upon Sanger Method, holding the golden standard in Sequencing industry;
- Support up to 8-color fluorescence, single detection for more sites;
- •High resolution, High repeatability and outstanding sequencing quality;
- •Completely open detection platform, compatible with commercial kits in the market;
- Language interface customizable, free charge of software upgrading;
- •High-cost performance, saving 50%+ of cost in consumables materials and reagents;
- Double certificated by NMPA and CE, ensuring the clinical compliance;
- Perfect technical support and after-sale services, 1 years of free warranty;

# Application Scenarios

- •Medical Treatment and Public Health: reprogenetics, cancer medication, pathogen typing, drug research and development, etc.;
- •Public Safety: Juridical expertise, criminal investigation, food safety, etc.;
- •Scientific research and others: environmental detection, biological protection and biological bredding, etc.



# >> Application of Gene Analyzer in Molecular Clinical Diagnosis

#### Reproductive health

- Trisomy 21 and sex chromosome polyploidy
- Y chromosome microdeletion
- Folate metabolism
- Fragile X syndrome
- HPV genotyping ... ...

#### **Infectious Disease**



Accurate use of infectious diseases (hepatitis B,

hepatitis C, Tuberculosis, HIV)

- Respiratory tract infection
- Diarrhea ......

#### Tumor

- Tumor targeting Medicine (EGFR, KRAS, BRAF, C-KIT, ALK, ROS1, NRAS, PDGFRA, PIK3CA, P53, BRCA1/2, ...)
- Chemotherapy Medicine (UGT1A1, DPD, 5-Fu Medication, platinum Medication Guidance)
- Microsatellite instability (MSI) .......



#### Hereditary Disease

- Neonatal jaundice (UGT1A1)
- Hereditary genetic deafness
- Dravet syndrome (SCN1A)
- HLA typing ... ...

#### **Blood Disease**

Classification, auxiliary diagnosis and treatment of blood diseases, treatment planning / reference, prognosis evaluation(AML, ALL, CLL, CML, MPN, MDS...) ... ...

#### Cardio Cerebrovascular

- Alcohol metabolism / nitroglycerin efficacy (ALDH2)
- Medication guidance (clopidogrel, warfarin) (CYP2C9 /VKORC1) ... ...



#### Product Parameters

#### **Basic Parameters**

Dimensions: Hatch closure: 812mm×610mm×532mm(L×W×H) Fully open: 812mm×1225mm×532mm

•Weight: About 95 kg

•Channel: 8/16

•Fluorochrome No.: 6/8

Capillary Length: 36 cm, 50 cm

Sample Handling: Automatic, 96 orifice plate

Injection Method: AutomaticLaser: Semiconductor Solid

Wavelength of laser source: 505 nm

■Wavelength of fluorescent dye: > 520 nm

#### **Performance**

■Temp. Accuracy: ΔT≤0.2°C

•Resolution: 1 bp

Read length: Above 800 bp

#### **Work Environment**

■Power supply: 220 VAC, 50 Hz; single phase: 10 A, 2200 VA

■Ambient Temp.:  $20^{\circ}\text{C} \sim 30^{\circ}\text{C}$ , the temp. fluctuation would not be more than  $\pm 2^{\circ}\text{C}$  during

operation period

Relative Humidity: 20%-80% (non condensing)

Atmospheric pressure: 86 kPa~106 kPa

#### Product Performance

Gene Sequencing Flux and Performance Index									
Operation Mode	Flux	Consumables		Performance					
	Average operating time (min)	Maximum flux(sample/day)	Capillary length (cm)	Glue Type	Continuous reading length (CRL)				
Sequence36_SY07	35	656	36	SY07	500 bp				
Sequence50_SY07	120	192	50	SY07	850 bp				
Fastseq50_SY07	60	384	50	SY07	700 bp				

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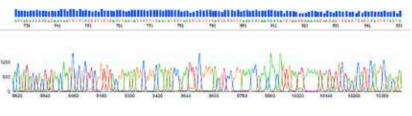


Fragment Analysis Flux and Performance Index												
Operating mode	Flux		Consumable		Performance							
					General Performance		Accuracy of fragment size analysis (Standard deviation)					
	Average operation (min)	Maximum flux (Sample/day)	Capillary length (cm)	Glue type	Resolution range	Longest fragment analysable	50-400 bp	401-640 bp	640-1200 bp			
GeneScan36_SY04	50	448	36	SY04	40-640bp	640bp	<0.15	<0.3	N/A			
GeneScan36_SY07	35	656	36	SY07	40-640bp	640bp	<0.15	<0.3	N/A			
GeneScan50_SY07	45	512	50	SY07	40-640bp	640bp	<0.15	<0.3	N/A			
GeneScan50_SY07Long	125	176	50	SY07	40-1200bp	1200bp	<0.15	<0.3	<0.35			

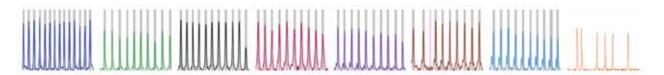
# Application Cases

#### **Sequencing Analysis**

In standard sequencing mode, using bigdye terminator v3.1 for sequencing analysis. From the waveform data, we can note that the base-pair still has high separation capability and QV value above 850 BP.



#### **Fragment Analysis**



In standard sequencing mode, using bigdye terminator v3.1 for sequencing analysis. From the waveform data, we can note that the base-pair still has high separation capability and QV value above 850 BP.



## **HPLC Servicing, Validation, Trainings and Preventive Maintenance:**

HPLC Servicing: HPLC Servicing: We have team of service engineers who can attend to any make of HPLC promptly @the most

affordable cost.

**Trainings** :We also take up preventive Maintenace to reduce downtime of HPLC's Trainings.

AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-

shooting.

**Validations** :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

Instruments: We offer instruments/Renting Services Modules like pumps, detector etc. on Rent.





# **About Analytical Technologies**

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

# **Our Products & Technologies**



UV/VIS Spectro 2080+ Double Beam



Infra FTIR



Optima Gas Chromatograph 3007



Optima Gas Chromatograph 2979 Plus



Flash Chromatograph



Atomic Absorption Spectrophotometer



Liquid Partical Counter



Optical Emission Spectrophotometer



DSC/TGA



Semi Auto Bio Chemistry Analyzer



HEMA 2062 Hematology Analyzer



Micro Plate Reader/Washer



URINOVA 2800 Urine Analyzer



Total Organic Carbon 3800



Fully Automated CLIA



NOVA-2100 Chemistry Analyzer



PCR/Gradient PCR/ RTPCR



TOC Analyzer



Laser Particle Size Analyzer



Ion Chromatograph

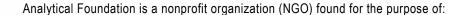


Water purification system

### Regulatory compliances



# **Corporate Social Responsibility**





- 1.Research & Innovation Scientist's awards/QC Professional Award: Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personallities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at Info@analyticalfoundation.org
- 2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.
- 3. ANALYTICAL FOUNDATION aims to DETOXIFY human minds, souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

# Reach us @





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