

CLART® Technology

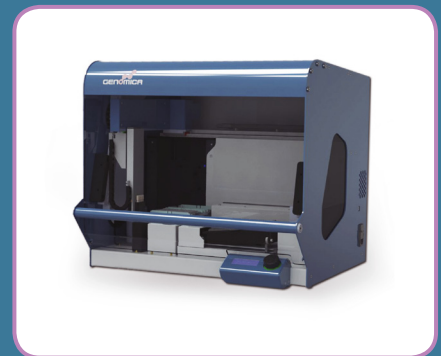
CLART® is a low density microarray-based platform for clinical use that allows the detection of multiple targets in a single test. Sample processing is straightforward and the analysis and interpretation of results are performed automatically by a reader (CAR® or CLINICAL ARRAY READER) running tailor-made software. Its simplicity makes this technology suitable for every molecular diagnostics laboratory.

CLART® provides fast, sensitive and accurate results that meet the highest quality standards, and allows the clinician to take the right decisions on time.



autocart®

Autocart is a GENOMICA automation system. It is designed for microplate processing and provides reagents addition, liquid handling, heating, cooling and microplate shaking. Its technical features make it suitable for almost all molecular diagnostics laboratories throughput:



AUTOCLART MAIN ADVANTAGES :

- ▶ Reduce significantly the hands-on time required for performing any CLART® assay.
- ▶ Minimizes the potential intra-assay variability, but also inter-laboratory variability.
- ▶ All consumables are housed inside the instrument, giving a very small footprint in the lab.
- ▶ Flexibility in number of samples per run, from 4 to 96 at once.

FEATURES :

- Compact size: 60 x 60 x 65 cm.
- Plug and play system.
- Operator interface is via an integral control panel containing a knob and a LCD display screen.
- Microplate holder offers: heating and cooling under a peltier controlled system, giving precise temperature control during assay, but also shaking wells during incubations.



CAR[®]

CAR[®] (Clinical Array Reader) is a colorimetric array reader unit, running our proprietary software, SAICLART[®], for the analysis and interpretation of the array images. SAICLART[®] has been designed and validated for interpreting the arrays images turning them automatically into clinically relevant data. The reader displays an interface called CLEIS (CLART[®] End-user Interface Software), based on the extensive experience and the customers feedback provided, thus obtaining a very intuitive userfriendly format.



TECHNICAL CHARACTERISTICS :

- ▶ Integrated Computer.
- ▶ Touch screen.
- ▶ Easy data management:
 - LIS bidirectional connection.
 - HTML and bmp formats.
 - Printable, exportable and storable reports.

SAICLART[®]

SAICLART[®] is GENOMICA's proprietary image processing software for microarrays analysis and interpretation. Originally developed for its diagnostic platform, SAICLART[®] can process microarrays in a wider range of formats like slides, tubes and microplates, spotted in a great variety of configurations.

- The image analysis is completely automated, avoiding the subjectivity that introduces user interaction, and providing fast, accurate and repeatable results.
- Its architecture allows easy and convenient customization for both R&D laboratories and *in vitro* diagnostics.

The SAICLART[®] recognition algorithm discerns spots from background signals using an advanced proprietary recognition algorithm:

- Identifies and segmentates the spots, validating them according to morphological criteria.
- Quantifies their signal considering all their effective area and offering up to 30 metrics per feature.

