

Genómica de Alta Capacidad

Optimiza eficiencia y costes de tus reacciones basadas en PCR gracias a la microfluídica

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IZASA SCIENTIFIC

Agenda



¿Quién somos?



Beneficios de la microfluídica



Soluciones basadas en PCR

izasa scientific
a werfen company



150
Employees

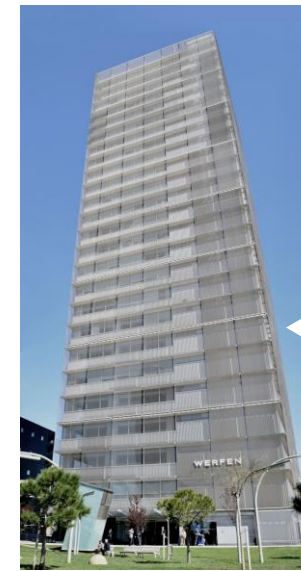
45
Sales

31
Product Manager

74
Services & Support

75%
University degree

35%
PhD



werfen

+7.000
Employees

+30
Countries

In vitro diagnostic
Medical Devices

Scientific Instrumentation

1966

Referencia en distribución de instrumentación científica y equipos de laboratorio en Iberia

Founded

Life Science
Optical Microscopy

Analytical

Environment

Industrial quality control

Electronic Microscopy



Service

+50
Engineers

ST oficial
+ 1.000 service plans
+ 10.000 interventions per year
11 localizaciones en iberia



Supply Chain

Logistic center
13.934 m² (15 - 25°C)
+ 15.000 part numbers
+1.100 dials delivery notes



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EVOLUCIÓN DE LOS SISTEMAS DE MICROFLUÍDICA

De varios componentes...

a una única plataforma integrada



Controllers/JUNO + Biomark

Integrated fluidic circuit (IFC)
controllers + thermal cycler +
detection

**X9™ High-Throughput
Genomics System**

* Los equipos no
están representados
a escala



es ahora...

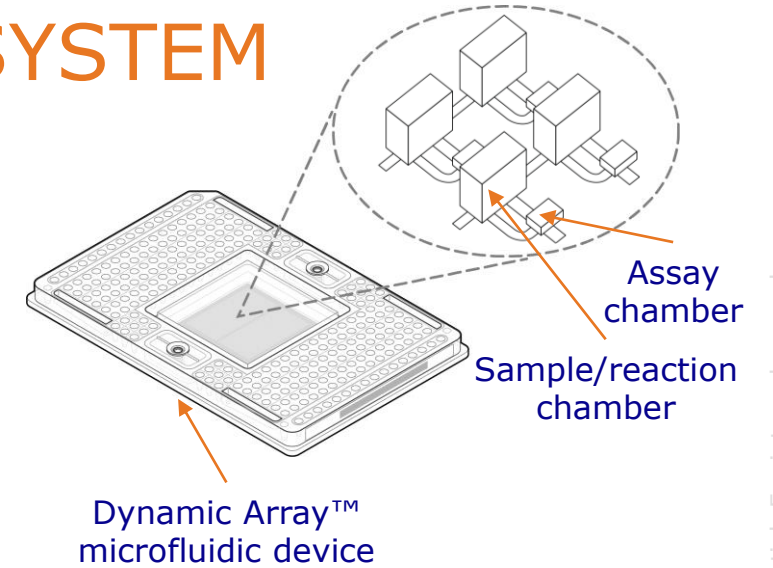


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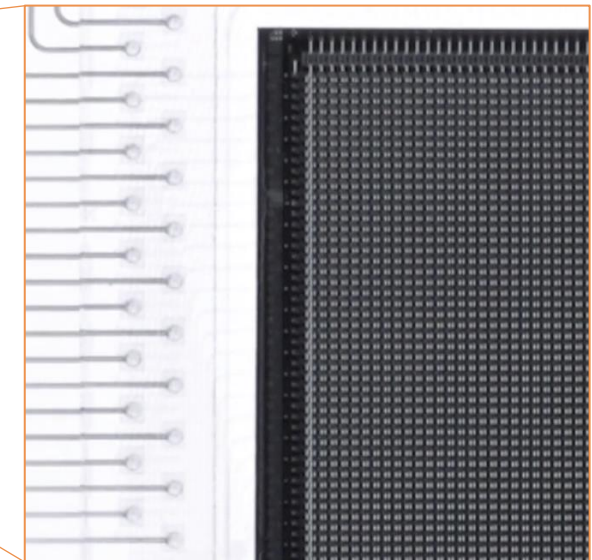
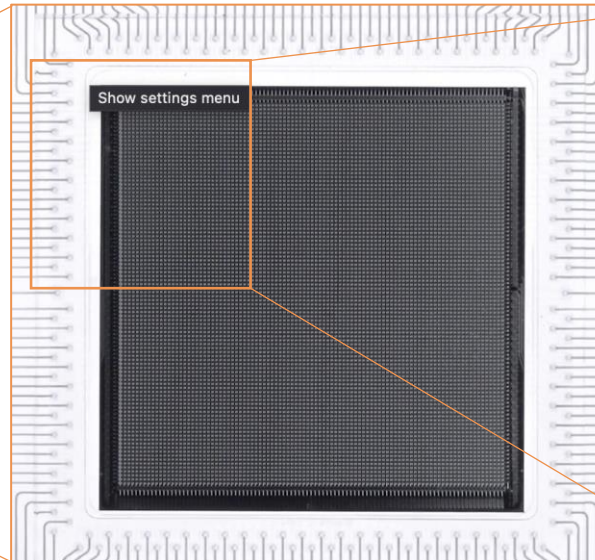
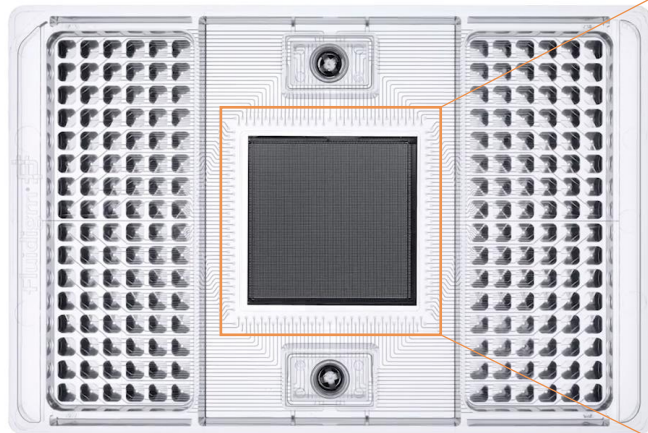
X9™ HIGH-THROUGHPUT GENOMICS SYSTEM

Proven proprietary technology

- ✓ Tecnología presente en el mercado desde 2006 (Biomark™) con cientos de publicaciones
- ✓ Flexibilidad en el diseño y en la química



IFC: Integrated Fluidic Circuit



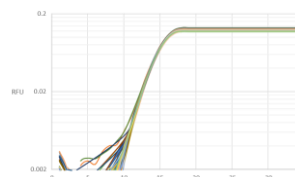
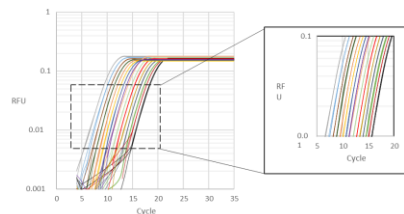
BENEFICIOS MICROFLUÍDICA

- ❖ **Automatización** en la mezcla de reactivos y muestras
- ❖ Reacciones **individuales** en volúmenes de **nanolitros**

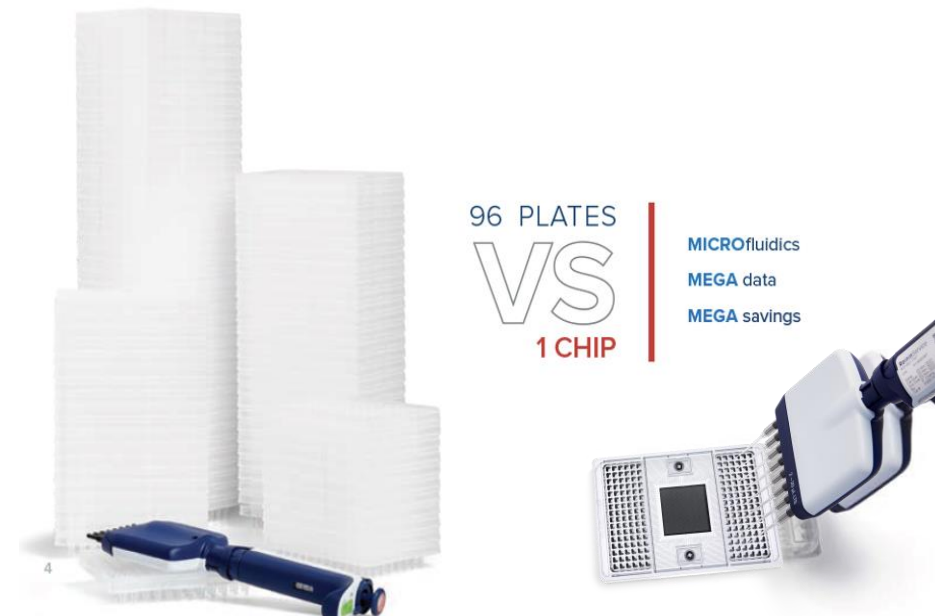
- ↓ Tiempo de manos
- ↓ Número de pipeteos
- ↓ Volumen de muestra
- ↓ Volumen de reactivos



- ↑ Eficiencia
- ↑ Reproducibilidad



**Optimización y reducción
de los costes de reacción**



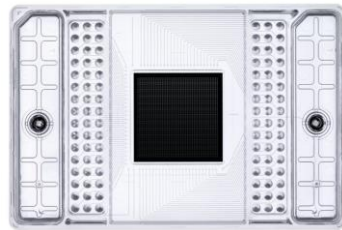
qPCR
Hasta 96 reacciones
individuales por muestra
=
hasta 9.216 datapoints por run

NGS LP
Hasta 4.800 barcoded amplicons
por librería de muestras

X9™ HIGH-THROUGHPUT GENOMICS SYSTEM

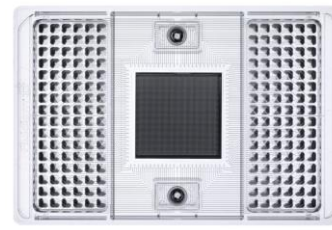
Flexible y escalable para adaptarse a las necesidades de cada experimento

Mid-capacity to support early-phase discovery and low-volume testing seasons



48.48 Dynamic Array™

Superior data-generation capacity for deep sample profiling



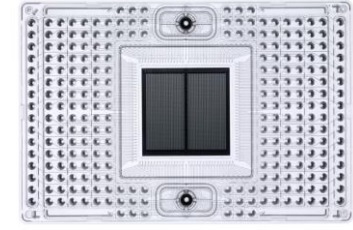
96.96 Dynamic Array™

High sample throughput to support peak seasonal and large studies



192.24 Dynamic Array™

Integrate preamplification for scarce sample inputs and precious material



96.96 GT Preamp IFC-X

Applications

GE, qPCR

GE, qPCR, GT

GE, qPCR, GT

GE, qPCR, GT

Samples/targets

48/48

96/96

192/24

96/96

Datapoints

2,304

9,216

4,608

9,216

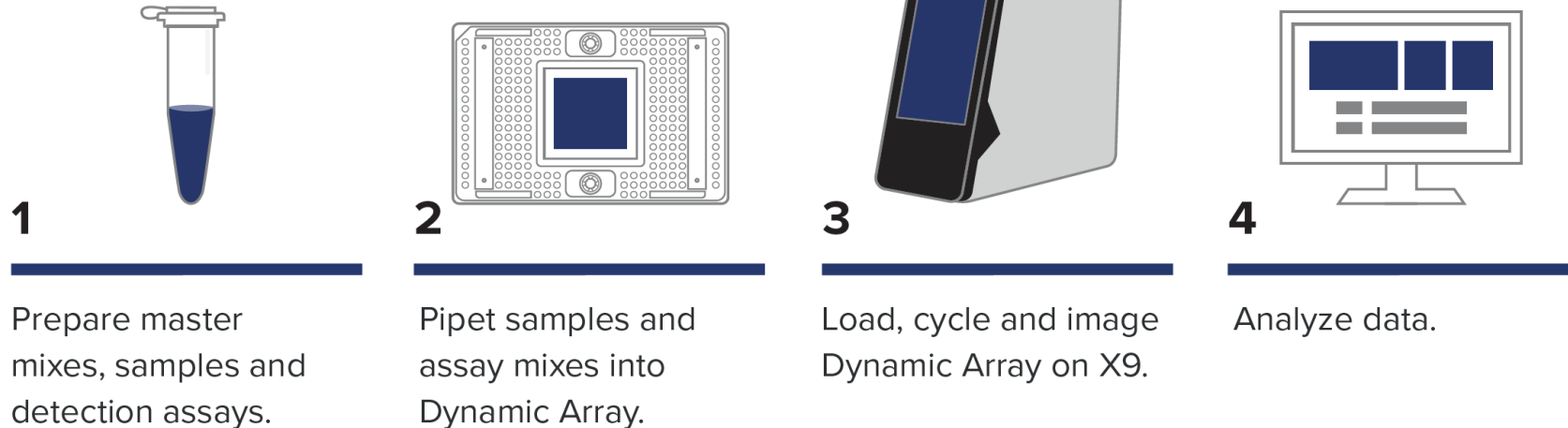
NEW! Support for NGS library preparation

X9™ HIGH-THROUGHPUT GENOMICS SYSTEM

Flujo de trabajo con mínimo esfuerzo e intervención del usuario

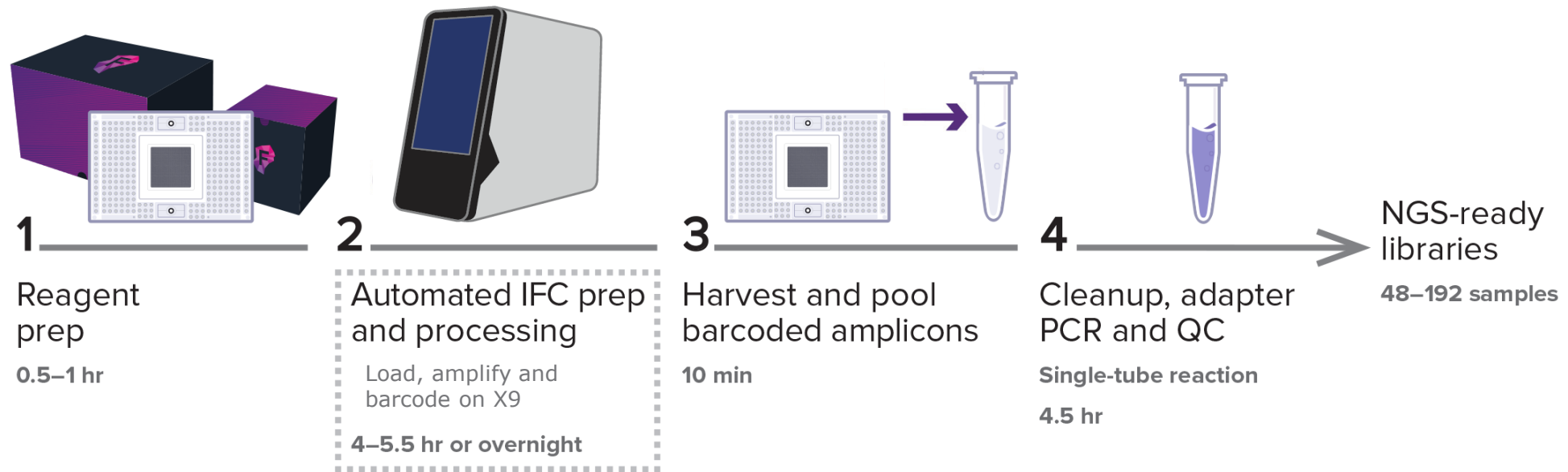
- ✓ Una única plataforma para todas las reacciones del experimento
- ✓ Reducción del número de pasos manuales para reducir el error humano

Resultados de Expresión Génica o Genotipado en menos de 2 horas.



X9™ WORKFLOW FOR NGS LIBRARY PREP




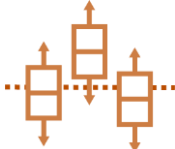

Flujo de trabajo con mínimo esfuerzo e intervención del usuario



Posibilidad de dejar el run overnight.

Automatización de la carga de las IFCs en un sistema robotizado.

X9™ HIGH-THROUGHPUT GENOMICS SYSTEM

Applications	Content
 <p data-bbox="545 439 843 515">GENOTYPING and SNP DETECTION</p>	<ul data-bbox="1136 375 2040 568" style="list-style-type: none">• Advanta™ Sample ID Genotyping Panel• SNP Type™ genotyping (D3™)• Pre-designed TaqMan™ assay• User-designed hydrolysis probe assays
 <p data-bbox="545 632 1021 708">GENE EXPRESSION and RELATIVE QUANTIFICATION</p>	<ul data-bbox="1136 625 2135 718" style="list-style-type: none">• Pre-designed TaqMan assay• Customer-designed hydrolysis probe assays
 <p data-bbox="545 789 1014 865">PATHOGEN DETECTION and PRESENCE/ABSENCE</p>	<ul data-bbox="1136 782 2028 875" style="list-style-type: none">• Pre-designed TaqMan assay• User-designed hydrolysis probe assays
 <p data-bbox="545 968 996 1001">COPY NUMBER VARIATION</p>	<ul data-bbox="1136 968 1786 1008" style="list-style-type: none">• CopyCount-CNV™ Software
 <p data-bbox="545 1150 1021 1183">NGS LIBRARY PREPARATION</p>	<ul data-bbox="1136 1089 2226 1225" style="list-style-type: none">• Advanta™ Solid Tumor and RNA Fusions Panels• D3™ custom assay design• Illumina® sequencers and sequencing chemistry

Multiplex data with
singleplex simplicity.

AGRICULTURAL
GENOMICS

WILDLIFE

CONSERVATION

FISHERIES | HATCHERIES

SUSTAINABLE AGRICULTURE

ANIMAL HEALTH

PHARMACOGENOMICS

SAMPLE ID

BIOBANKING

SAMPLE SCREENING

SAMPLE INTEGRITY

PATHOGEN DETECTION / ID

ONCOLOGY

SOLID TUMOR

RNA FUSIONS

ENVIRONMENTAL MONITORING

IMMUNE RESPONSE

AND MORE



THANK YOU

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a werfen company