sysmex | Together for a better healthcare journey

CytoCell CytoSure SureSeq

First-class solutions for molecular genetics

FISH, array and NGS technology for haematology, pathology and cytogenetics

New benchmarks in cancer treatment

More than nine thousand people are diagnosed with cancer in Europe every day. The systematic development of diagnostic and therapeutic solutions leads to improved survival rates and quality of life for patients.

At Sysmex, we also contribute to improving care in cancer management. With deep scientific knowledge and an understanding of clinical needs, we work in close partnership with you to provide innovative diagnostic solutions.

Oxford Gene Technology (OGT), a Sysmex group company, is a pioneer in hybridisation technology and a leading supplier of clinical research and diagnostic solutions.

The product lines CytoCell® for FISH, CytoSure® for Microarray and SureSeq™ for NGS (Next-Generation Sequencing) offer top-quality genetic analyses for precise identification of genetic abnormalities.

CytoCell CytoSure SureSeq

CytoCell

First to market IVDR-certified FISH probes

CytoCell® – IVD and IVDR FISH probes for oncology and hereditary diseases

CytoCell® offers over 250 high-quality, reliable and easy-to-use IVD fluorescence *in situ* hybridisation (FISH) probes and is steadily increasing the number of IVDR-certified probes with a wide variety of options for customisation (RUO*). The extensive range of CytoCell® FISH probes for haematological malignancies, solid tumours and pre- and post-natal testing enable rapid and clear *in situ* detection of genetic changes in a variety of sample types.

Benefits at a glance

- ✔ Highly specific, reliable and easy-to-use
- ✔ Simple design of customer-specific FISH probes using myProbes® (RUO*)
- ✔ Fast and high-quality results
- ✔ FAST-FISH assays for precise reporting of most frequent prenatal chromosomal abnormalities
- ✔ Microdeletion probes for detecting some of the rarest human genetic syndromes
- ✔ Subtelomere-specific probes
- ✔ Optimised for challenging tissue samples (Tissue Pretreatment Kit)

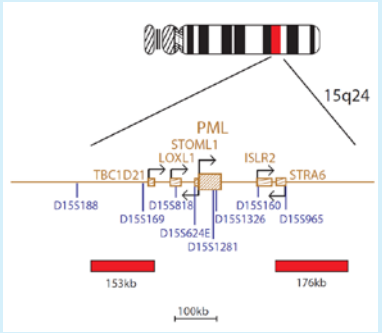

Fig 1 Probe design 15q24 (PML).

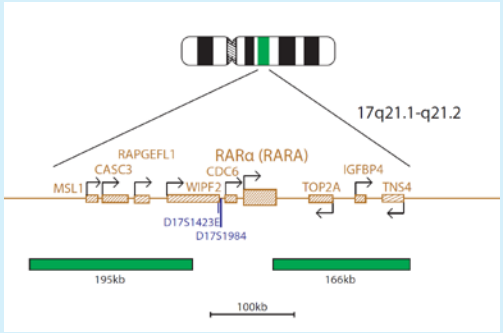

Fig 2 Probe design 17q21.1-q21.2 (RARα).

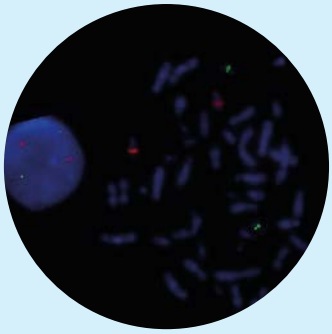

Fig 3 Probe specification:
Red: PML, 15q24.
Green: RARA, 17q21.1-q21.2.

Custom solutions

CytoCell myProbes® (RUO*) is a service for the development and production of customer-tailored FISH probes. In partnership with you, we develop probes that meet your individual, specific requirements – from a simple modification of a FISH probe design that is already available up to a completely new and innovative probe.

Contact us for an evaluation quote!

* For Research Use Only. Not for use in diagnostic procedures.

CytoSure® – Arrays for cytogenetics and rare diseases clinical research

With CytoSure® we offer you an extensive selection of hybridisation-based DNA arrays for research on constitutional, prenatal diseases, cancer research, as well as for a wide variety of rare diseases, including autism and epilepsy.

Benefits at a glance

- ✔ Superior uniformity of results due to precise expert design
- ✔ Excellent coverage of up to 502 genes for developmental disorders and intellectual disability with the Constitutional v3 Array
- ✔ Identification of loss of heterozygosity (LOH) and uniparental disomy (UPD) using special SNP probes
- ✔ Based on current ID/DD gene content from the Deciphering Developmental Disorders (DDD) study, and the newest ClinGen database
- ✔ Wide selection of arrays for rare diseases
- ✔ Easy switching from arrays to NGS with the Constitutional NGS Panel, with the additional ability to detect SNVs and indels
- ✔ Compatible with FFPE samples
- ✔ Fast, customisable and user-friendly analysis with Interpret software
- ✔ Fast and knowledgeable technical support

Contact us for an evaluation quote!

Research field	Array	Gene-targets	Detectable aberration types
Constitutional	CytoSure® Constitutional v3	502	CNVs
	CytoSure® Constitutional v3 + LOH	354 + 43.654 SNPs	CNVs + LOH
Cancer and rare diseases	CytoSure® Cancer + SNP Array	18 key genes exon resolution + 1.500 whole genome resolution	CNVs + LOH
	CytoSure® Cardiomyopathy Research Array	223	CNVs
	CytoSure® Embryo Screen Array		
	CytoSure® Ciliopathy Research Array	207	CNVs
	CytoSure® Eye Disease Research Array	221	CNVs
	CytoSure® Epilepsy Research Array	212	CNVs
	CytoSure® Medical Research Exome Array	4645	CNVs
	CytoSure® Hereditary Cancer Research Array	228	CNVs
	CytoSure® Metabolic Disorder Research Array	203	CNVs
	CytoSure® NMD Research Array	205	CNVs
	CytoSure® Skeletal Dysplasia Research Array	234	CNVs
	CytoSure® Autism Research Array	227	CNVs

Standard array catalogue available. Individually customisable at any time.

SureSeq™ – NGS products for clinical research on haemato-logical malignancies, solid tumours and constitutional diseases

SureSeq™ includes an excellent, constantly growing portfolio of NGS panels. In combination with the newest Universal Library Preparation Kit, we offer you a fast and confident workflow for successful NGS applications.

Benefits at a glance

- ✔ Reliable detection of low-frequency SNVs and indels, as well as structural aberrations such as ITDs, PTDs, CNVs, LOH and translocations
- ✔ Superior uniformity of results due to careful, precise panel design
- ✔ Unparalleled coverage uniformity, even in difficult regions
- ✔ High accuracy through use of UDIs and UMIs
- ✔ Fast and user-friendly analysis with Interpret software
- ✔ 40 % shorter hands-on time with the Universal Library Preparation Kit

Do you have special requirements? We are happy to design NGS panels that meet your specific needs. Contact us for your individual panel and quote.

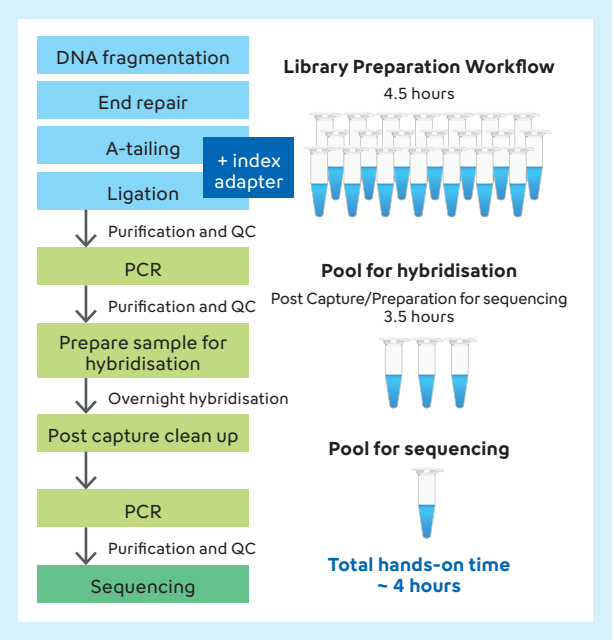

Fig 4 Simple, standardised sample preparation protocol with the new Universal Library Preparation.

Research field	Panel	Gene-targets	Detectable aberration types	Panel size	Mean target coverage
Constitutional	Constitutional NGS	707 ID/DD genes	CNVs, SNVs, indels and LOH	8,5 Mb	> 250×
Cancers	Germline Breast Cancer + CNV Panel	7	SNVs, indels, CNVs	52,6 Kb	> 1000×
	Core MPN Panel	3	SNVs, indels, translocation (optional)	1 Kb	> 1000×
	Core MPN Panel + BCL-ABL	4	SNVs/indels + translocation detection	22 Kb	> 1000×
	Myeloid Plus Panel	49 (+4)	SNVs, indels, ITDs, PTDs	132 Kb	> 700×
	Pan-Myeloid Panel	70 (+4)	SNVs, indels, ITDs, PTDs	221 Kb	> 1000×
	CLL + CNV Panel	12	SNVs, indels, CNVs	117 Kb	> 1000×
	myPanel CLL + CNV (+BCL2)	13	SNVs, indels, CNVs	118 Kb	> 1000×
myPanel	myPanel NGS Custom Cancer Panels	1 – 210+	SNVs, indels, ITDs, PTDs, CNVs, translocation		

Standard panel catalogue available. Individually customisable at any time via myPanel.

CytoCell® FISH probes: For laboratory professional use only. Not intended for use as stand-alone diagnostics or companion diagnostics.
Therapeutic action should not be initiated on the basis of the FISH result alone.
CytoCell® and myProbes® are registered trade mark of Cytocell Limited.
CytoSure®, SureSeq™ and myProbes®: For Research Use Only. Not for diagnostic procedures.
OGT™, CytoSure® and SureSeq™ are trade marks of Oxford Gene Technology IP Limited.

Distributor EMEA: Sysmex Europe SE · www.sysmex-europe.com
Manufacturer CytoCell®: Cytocell Limited · www.ogt.com
Manufacturer CytoSure® and SureSeq™: OGT · www.ogt.com
You will find your local Sysmex representative's address under www.sysmex-europe.com/contacts

www.sysmex-europe.com/cytocell-fish

EN.N.05/24