

Celemics CancerScreen CUP

Explore the Unknown
Primary Cancer with
Celemics' Exclusive Technology

Key Features

- Probe specifically designed for methyl-seq
- Compatible with various sample types and C/T conversion method
- Primary cancer differentiation
- Easy to follow protocol and flexible integration on various sequencing platform

CancerScreen CUP

Methylation sequencing can identify the locations and levels of methylated DNA in a genome-wide or targeted manner for various applications of epigenetic research. Celemics' solution for DNA methylation sequencing can provide more comprehensive and detailed patterns of specific target region of your choice. Also, Celemics targeted methylation sequencing can provide solutions for the study of Cancer of Unknown Primary (CUP) to classify and originate the metastatic tumors, leading to the precision-driven therapeutic interventions.

Methylation Sequencing Workflow and Probe Design Technology

Probe-specific Methylation Sequencing

With the probes specifically designed for methylation sequencing, Celemics perform comparison analysis of the sequences before and after bisulfite conversion, enabling accurate detection of methylation sites.

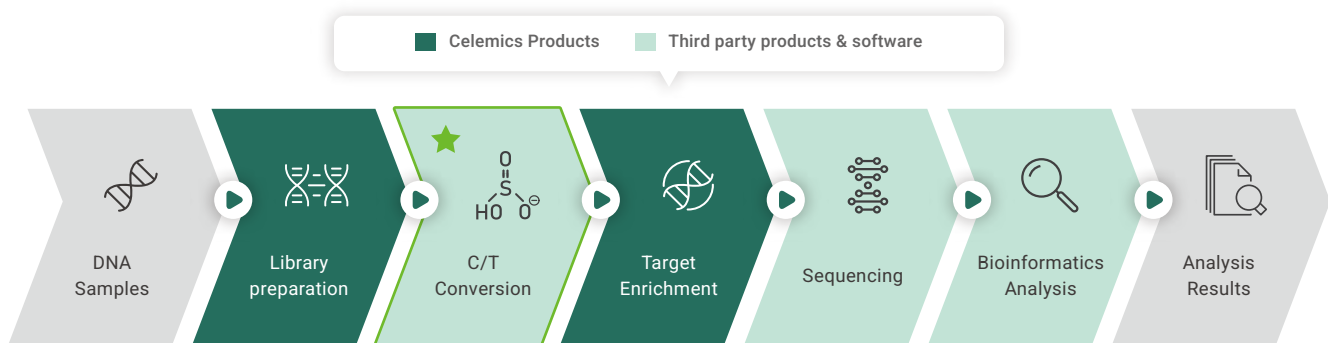


Figure 1. Targeted methylation sequencing workflow. Celemics provides and support easy-to-follow protocol for methylation sequencing. * C/T Conversion Kit not provided; Celemics can provide optimization services with any bisulfite conversion kit of choice.

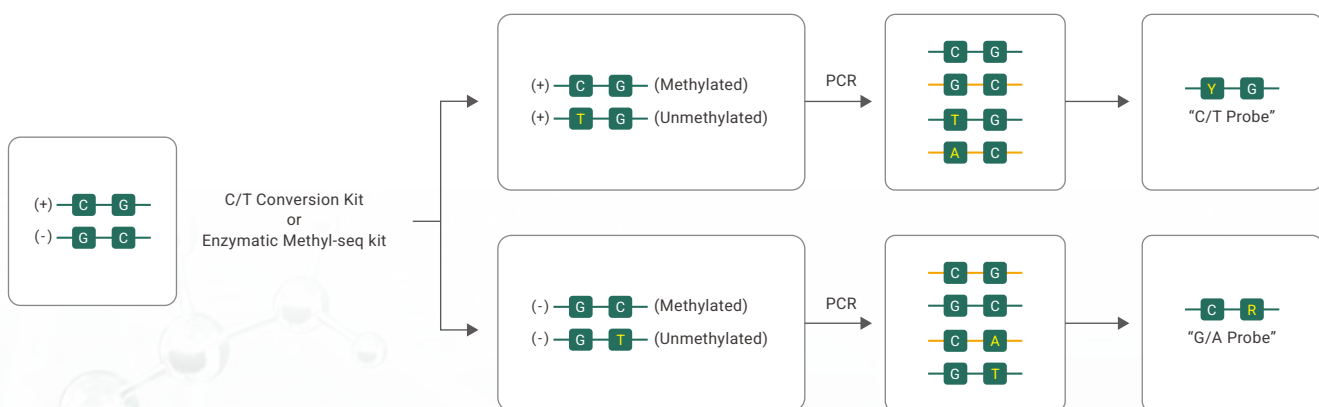


Figure 2. Process for exclusive Celemics' methyl-seq probe design. Celemics introduces exclusive set of probes specifically designed for methylation sequencing, considering the sequence alteration by bisulfite conversion.

Performance Data

Targeted Methylation Sequencing for Cancer of Unknown Primary (CUP)

Celemics Customized Targeted Methylation Sequencing Panel Solution offers proprietary probe design and a specialized workflow for detecting and classifying the Cancer of Unknown Primary (CUP). The performance data below represents analyses of 14 samples, which comprised cell lines from 5 different cancer types, demonstrating its compatibility and operability for successfully categorizing and identifying the origin of the tumors.

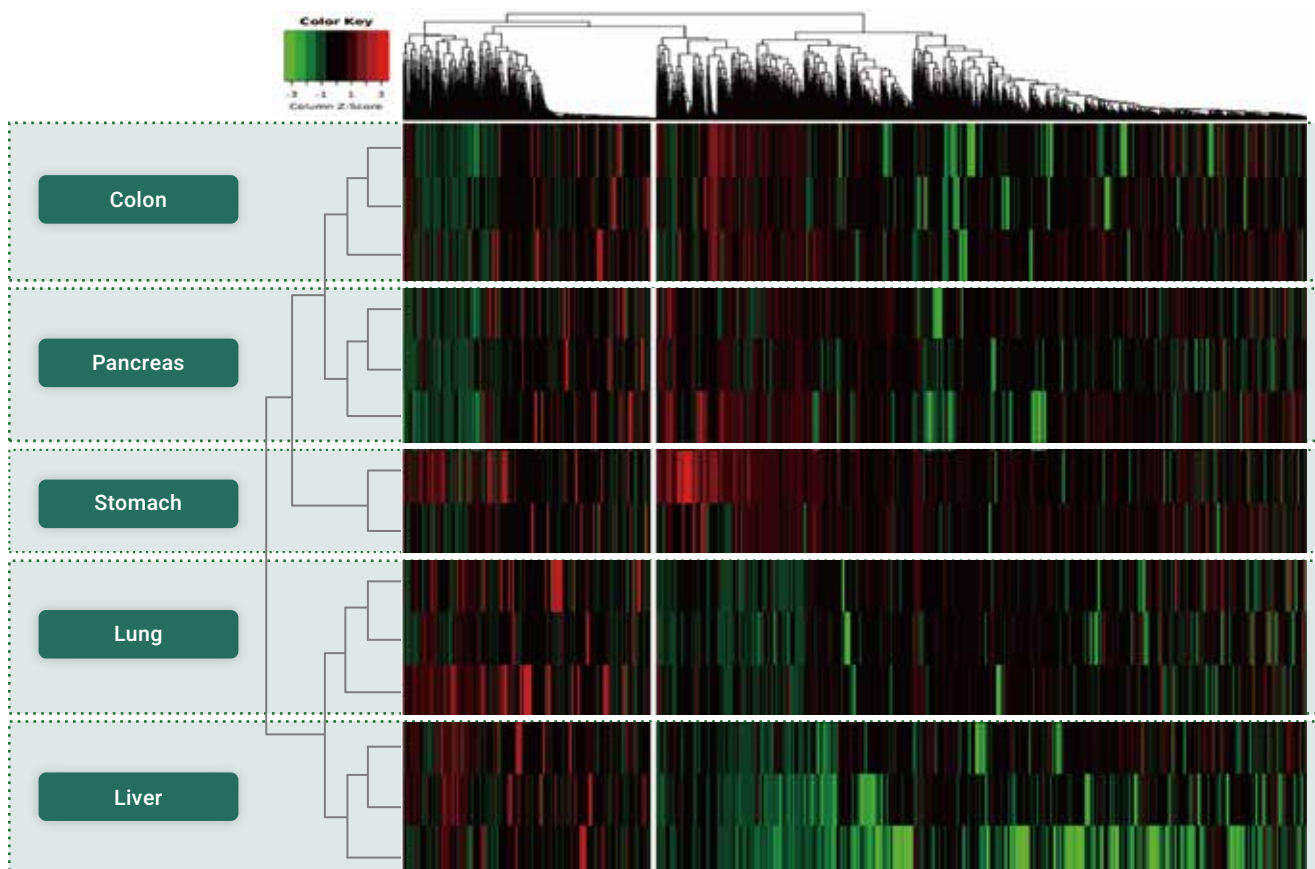


Figure 3. Heatmap and hierarchical clustering results of 14 cancer samples. CancerScreen CUP panel successfully validated and differentiated 14 cancer samples into 5 different cancer types.

ACC	BLCA	BRCA	CESC	CHOL	COAD	DLBC
ESCA	GBM	HNSC	KICH	KIRC	KIRP	LGG
LIHC	LUAD	LUSC	MESO	PAAD	PCPG	PRAD
READ	SARC	SKCM	STAD	TGCT	THCA	THYM
UCEC	UCS	UVM				

Table 1. 31 target cancer types of Celemics CancerScreen CUP Panel.

Order Information | CancerScreen CUP Panel

Target Enrichment Kit

Cat. No.	Product	Product Unit(Hyb-rxn)
CCPS.HI.MS16/96	CancerScreen CUP Panel; Singleplex; Illumina	16/96
CCPM.HI.MM2/4/8/16	CancerScreen CUP Panel; Multiplex; Illumina	2/4/8/16

Library Prep Kit

Cat. No.	Product	Product Unit(Sample)
ILUM016/032/048/096	Illumina; Library Prep Kit; UDI; Methyl Adapter	16/32/48/96
IEUM016/032/048/096	Illumina; Enzymatic Library Prep Kit; UDI; Methyl Adapter	16/32/48/96

* More index options are available. Please inquiry to our sales team.

Accessories

Cat. No.	Product	Product Unit(mL)
CMPF-M-025/100/550	CLM Polymerase	2.5/10/5.5
CMSB-M-025/100/550	CeleMag™ Streptavidin Bead	2.5/10/5.5
CMCB-M-005/010/050/100/250/500	CeleMag™ Clean-up Bead	0.5/1/5/10/25/50

Celemics HQ

19-20F Bldg. A, BYC Highcity, 131, Gasandigital 1-ro,
Geumcheon-gu, Seoul, 08506, Korea
TEL: +82.2.6746.8067 FAX: +82.2.6746.8073
support@celemics.com
www.celemics.com

US Office

1709 Rimpau Ave. Ste. 105 Corona, CA 92881(TEL: +1.951.805.8845)

India Private Limited

8th Floor, Whitefield Rd, Brigade Metropolis, Garudachar Palya,
Mahadevapura, Bangalore, Karnataka, 560048, India (TEL: +91.80000.57106)