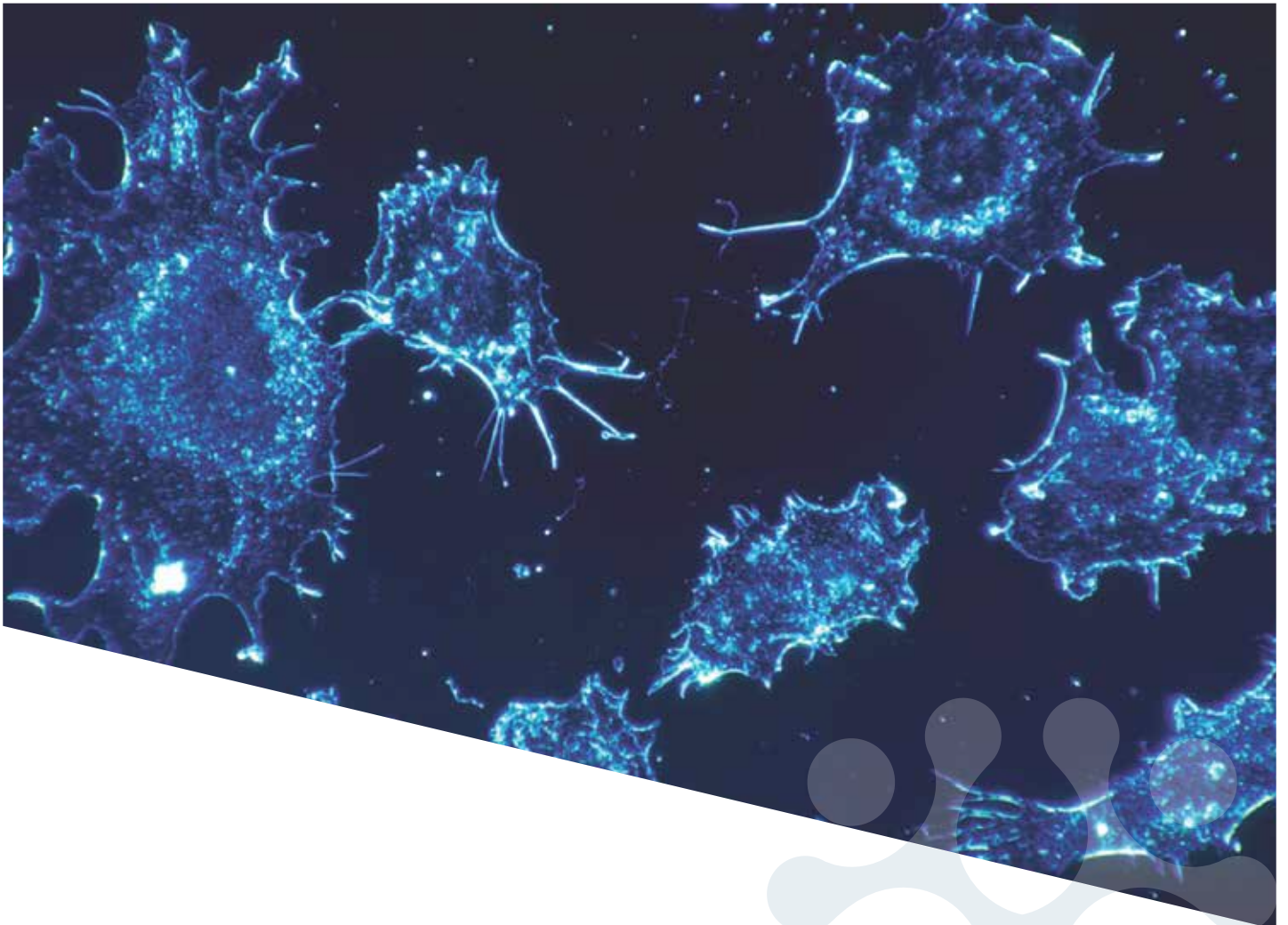


Precision at every step

CancerSCAN

geninus 

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“ Your Clinical Companion ”

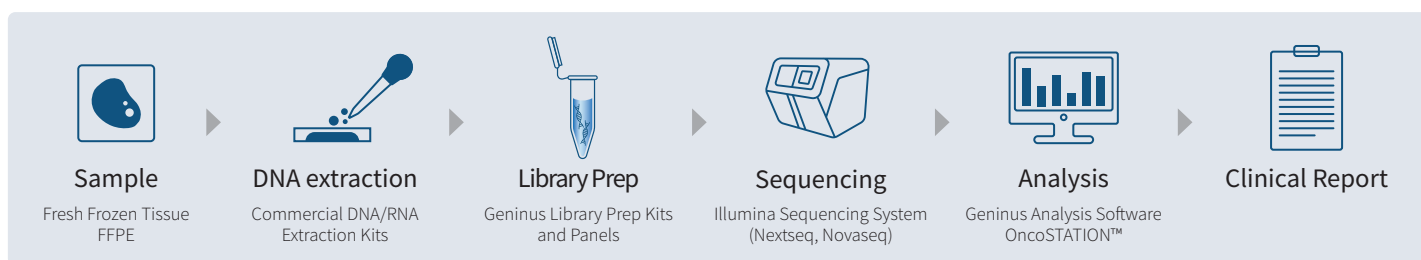
Highlights

- ✓ All-inclusive solution
- ✓ Comprehensive profile of MSI & TMB
- ✓ Flexible customization & optimization
- ✓ Clinically stabilized and technically reliable

What is CancerSCAN®?

CancerSCAN® is a comprehensive genomic analysis engine designed to empower precision cancer management. It is a next-generation sequencing (NGS) assay that analyzes 407 cancer-related DNA and 211 cancer-related RNA in a streamlined workflow. CancerSCAN® delivers the outcome in a seamlessly organized report that encompasses vital actionable information for practitioners in the clinical domain, including multiple variant types, tiers by disease and targeted drugs.


Workflow



Types of variants detected by CancerSCAN®

Category	Number of genes	SNV and Indels	Fusions	CNV	MSI	TMB
CancerSCAN® Compact	75	✓	✓	✓	-	-
CancerSCAN® IO+	407	✓	✓	✓	✓	✓

Features and benefits

-  **All-inclusive solution**
 Library prep kit, panel, data analysis and management software
-  **Flexible customization & optimization**
 Panel and software customization and optimization is available depends on needs
-  **Comprehensive profile of MSI & TMB**
 Enrich decision-making ability by precision-oriented IO
-  **Clinically stabilized & technically reliable**
 Being used in major hospitals and regularly updated database and algorithm

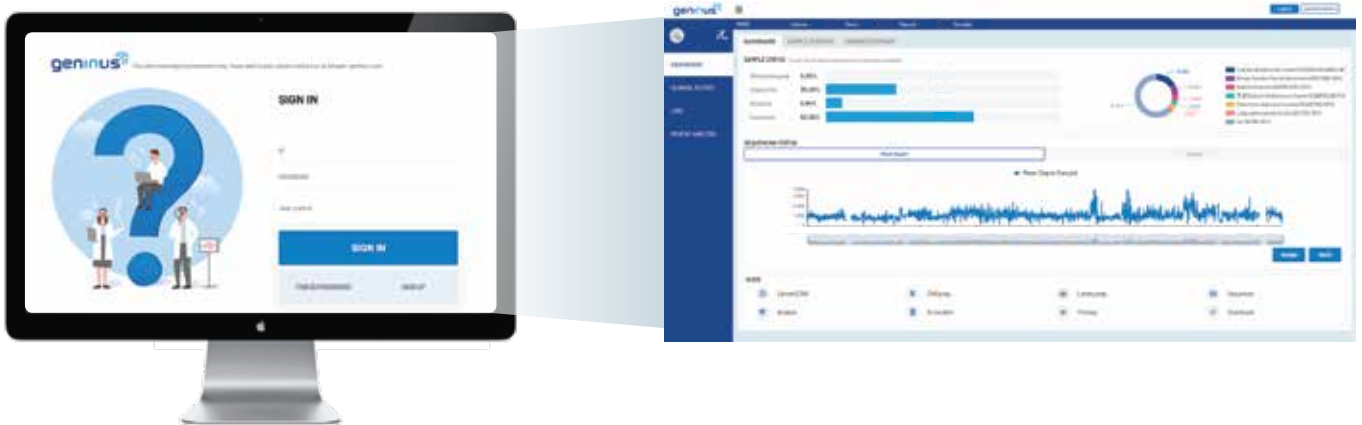
-  **>15,000**
 Clinical Sample Analysis
-  **>2,000**
 Per Year Analysis at Major Hospitals
-  **>150**
 Peer-reviewed Publications

Clinical report : Bridging data and clinicians



To respond to clinical needs, variants are classified in tiers established by American College of Medical Genetics (ACMG) and contents are designed by careful arrangement for actual usage and flexibility. From general information of patient to the drug annotations, CancerSCAN® report reflects our duty to help clinicians make the most appropriate decision by having the confidence to leverage NGS technology.

OncoSTATION™ : Beyond data, towards clinics



OncoSTATION™ is a software having its competency in supporting Laboratory information management system (LIMS), bioinformatics analysis and visualization UI provided to the customers as a package. Its automated system enables straightforward data analysis using proprietary algorithm. OncoSTATION™ provides a user-friendly environment for pathologists and clinicians by implementing it in sync with EMR so that pathologists and clinicians can conveniently apply the test result to the clinical trials and share professional insights with specialists from various fields at the tumor board.

Service specification

Parameter		CancerSCAN® Compact		CancerSCAN® IO+	
Number of Genes		75		407	
Sequencer		Illumina NextSeq550Dx or Illumina NextSeq 550 or Illumina NovaSeq 6000			
Total run time (Assay to report)		Fee-for-service at Geninus : 4 weeks upon recipient of sample On-premise : 7 days			
Kit size		96 samples			
Limit of detection		2% (lower % can also be reported upon request)			
Analytical sensitivity	Variant class	SNV	INDEL	FUSION	CNV
	Sensitivity	99.77 %	99.56 %	93.75 %	99.99 %
	VAF	100 %	96.66 %	NA	100 %

Multiple cancer types and biomarkers included in CancerSCAN® IO+

Lung

BRAF TP53 KRAS MET NF1 ERBB2 ALK DDR2
RB1 STK11 RET CDKN2A FGFR1 MAP2K1 RIT1
FGFR3 NRAS EGFR PIK3CA PTEN SMARCA4

Gastric

CDH1 KIT BRAF TP53 KRAS PMS2 MET MLH1
MSH2 PDGFRA MSH6 SMAD4

Colon

CHEK2 CDH1 BRAF TP53 AKT1 KRAS PMS2 MET
POLD1 POLE MLH1 APC STK11 MSH2 MSH6
SMAD4 HRAS NRAS PIK3CA PTEN MUTYH

Bladder

EP300 ATM CREBBP KMT2D TP53 PMS2 TSC1
RAF1 RB1 CDKN2A MSH6 FGFR3 HRAS PIK3CA
PTEN ARID1A

Breast

CHEK2 ATM CDH1 NBN BRCA1 PALB2 TP53
AKT1 BRCA2 RAD51C NF1 RAD51D BRIP1
ERBB2 BARD1 FGFR1 AR FGFR2 PIK3CA PTEN

Ovary

CDH1 BRAF FOXL2 NBN BRCA1 TP53 AKT1
BRCA2 CTNNB1 KRAS PMS2 MLH1 STK11
MSH2 PDGFRA MSH6 PIK3CA

Liver

TP53 CTNNB1 AXIN1 IGF2R SMAD2 SMAD4 RB1
CDKN2A CCND1 IDH1 KRAS ARID1A FGFR2
BAP1 CDKN2B KMT2D ATM PIK3CA BRAF

Sarcoma

BCOR MYC NTRK1 KDR ETV6 IGF1R KIT MDM2
BRAF EWSR1 SDHB ATRX KMT2D MED12 SDHC
TP53 BRCA2 CTNNB1 MET NF1 CDK4 ALK APC
DICER1 ERBB4 PAX3 RB1 NOTCH1 PAX7
CDKN2A CDKN2B PDGFRA TERT PDGFRB
MAP2K4 NRAS PIK3CA PTEN ARID1A SMARCB1
WT1 ARID1B

Myeloid

IDH1 IDH2 FLT3 ASXL1 RUNX1 ETV6 KIT ABL1
EZH2 SRSF2 TP53 CALR GATA2 SF3B1 MPL CBL
NPM1 TET2 JAK2 ERG CEBPA PTPN11 WT1

Melanoma

ATM KIT BRAF TP53 CTNNB1 NF1 MITF BAP1
CDKN2A GNA11 GNAQ MAP2K1 PDGFRA TERT
NRAS PIK3CA PTEN

*Selective biomarkers for each cancer type are listed.

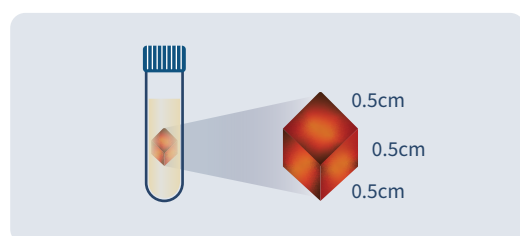
Service order process

1) Select service

	Service	Cancer type	Number of genes
1	CancerSCAN Compact	Pan-cancer	75
2	CancerSCAN IO+	Pan-cancer	407
3	LymphomaSCAN	Lymphoma	406
4	BTSCAN	Brain tumor	232
5	PedSCAN	Pediatric cancer	355

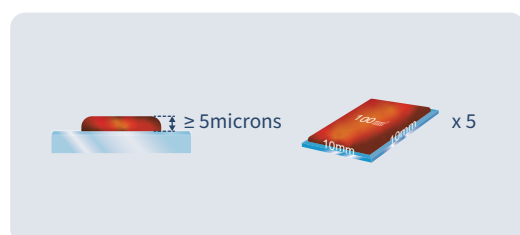
* Full gene lists are provided upon request.

2) Sample preparation



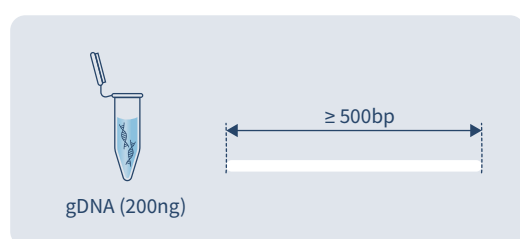
Fresh frozen tissue

- Over 30% tumor contents are recommended
- At least 0.5cm cube of tissue is required



FFPE

- Over 30% tumor contents are recommended
- At least 5 unstained slides at 5 microns thick are required



DNA

- At least 200ng genomic DNA is required
- Average DNA fragment length should be over 500bp

3) Shipping

Fresh frozen tissue & DNA

Pack with dry ice in Styrofoam box.

FFPE

Pack in sealed box and ship at room temperature.

📍 5F, KDU Tower, 70, Jeongui-ro, Songpa-gu, Seoul, 05836, Republic of Korea (서울시 송파구 정익로 70(문정동) KDU타워 5층)

☎ 02-6949-6570

Panel and reagent order process

Panel and library preparation kits are available for on-premise analysis.



1) Select panels and reagent

Product		No. of reactions	
CancerSCAN Compact CancerSCAN IO+ LymphomaSCAN BTSCAN PedSCAN	Customized panel	Customized probe	
	Library preparation kit	Fragmentation reagent	96
		Ligation reagent	
		Purification bead	
		Capture bead	
		Amplification primer	
		Hybridization/Binding/Wash buffer	
		Blocker	
Enhancer solution			

The panel and library preparation kit can be purchased together as a complete kit or separately.

2) Software installation

Analysis software will be setup with OncoSTATION™.
Please contact sales representative for software license.

Contact us

www.kr-geninus.com

☎ 02-6949-6570 Fax. 02-6949-6580

✉ info@kr-geninus.com

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