Seraseq® ctDNA MRD Panel Mix

REFERENCE MATERIAL DESIGNED FOR NGS MRD ASSAY VALIDATION AND ROUTINE MONITORING OF CLINICALLY ACTIONABLE VARIANTS IN VARIOUS SOLID TUMOR CANCERS

HIGHLIGHTS

HIGHLY MULTIPLEXED REFERENCE MATERIAL CONTAINING CILINICALLY-SIGNIFICANT VARIANTS PRIMARILY FOUND IN SOLID TUMORS

FIRST-TO-MARKET REFERENCE STANDARD FOR MRD MONITORING

HIGH-QUALITY MANUFACTURED REFERENCE MATERIAL; GUARANTEES CONSISTENT GROUND TRUTH

ABOUT LGC SERACARE

TRUSTED SUPPLIER TO THE DIAGNOSTIC TESTING INDUSTRY FOR OVER 30 YEARS

HIGH-QUALITY CONTROL PRODUCTS, RAW BIOLOGICAL MATERIALS, AND IMMUNOASSAY REAGENTS

INNOVATIVE TOOLS AND TECHNOLOGIES TO PROVIDE ASSURANCE IN DIAGNOSTIC ASSAY PERFORMANCE AND TEST RESULTS

FOR MORE INFORMATION, PLEASE VISIT OUR WEBSITE: WWW.SERACARE.COM

MRD monitoring typically involves measuring signs of a cancer in order to determine if it is disappearing (progression) or returning (relapse). Typically, this can be facilitated by use of less invasive techniques such as liquid biopsy (ctDNA), to monitor cancer-specific somatic variants. A patient-derived approach to the application of ctDNA-based MRD monitoring starts with a tumor profiling analysis to identify clinically relevant tumor variants that constitute the patient's genomic profile. Following this, a targeted panel/assay containing a subset of the gene variants can be designed for disease monitoring by detecting presence or absence of circulating tumor (ct) DNA variants in the patient's blood sample. These patient-derived MRD analyses represent a paradigm shift in disease monitoring, and have been adopted by leading liquid biopsy NGS vendors such as Natera's Signatera® platform and Archer/Invitae's Personalized Cancer Monitoring (PCM) assay.

LGC SeraCare has developed a novel ctDNA MRD mutation mix panel designed to support the development, validation and clinical deployment of a ctDNA-based patient-derived MRD monitoring NGS assays. The new Seraseq ctDNA MRD Panel Mix product is constructed from a combination of a diseased human cell line, its SNP-matched normal cell line, and biosynthetic DNA containing variants commonly targeted by therapeutic drugs (see list below). The blended DNA is fragmented, sized to mimic ctDNA fragment sizes, and serially diluted to tumor fractions (TF) of 0%, 0.5%, 0.05% and 0.005%.

Additional DNA genes included in the Seraseq® ctDNA MRD Panel Mix

AKT1	EGFR	NCOA4-RET
ALK	ERBB2	CD74-ROS1
BRAF	KIT	EML4-ALK
BRCA1	KRAS	
BRCA2	PIK3CA	

FEATURES AND BENEFITS

- Combination of diseased human cancer cell line, its SNP-matched normal and biosynthetic DNA variants
- Fragmented, sized (ctDNA), and blended at four tumor levels: 0% (WT), 0.5%, 0.05% and 0.005%
- Develop, validate and routinely determine presence/absence of patient-derived disease variants with high precision (against a matched normal (WT) background)
- Variant detection and VAF analysis by digital PCR and targeted cfDNA NGS assay
- Available as a purified DNA mix ready for targeted sequencing library prep
- Manufactured in GMP-compliant and ISO 13485-certified facilities

ORDERING INFORMATION

Product	Material No	Conc.	Fill Volume	Total Mass
Seraseq ctDNA MRD Panel Mix (Kit contains 4 vials: 0%, 0.5%, 0.05% & 0.005% tumor fractions)	0710-2146	10 ng/µl	20 µl	200 ng (x 4)

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