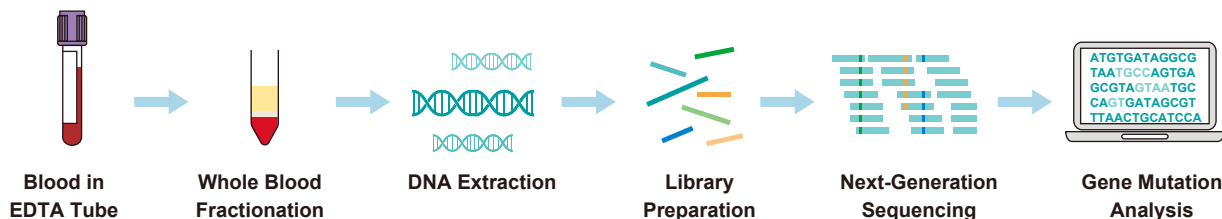


We provides an ISO15189 medical laboratory service to physicians and clinical researchers investigating circulating tumor DNA (ctDNA) released into the peripheral blood from tumor mass of cancer patients. Our capability is supported by a streamlined platform for ctDNA extraction, purification, library preparation and next-generation sequencing. ctDNA liquid biopsy is a precision tool for identifying and tracking cancer transformation and metastasis. It has significant clinical impact in cancer diagnosis, prognosis, treatment, and monitoring in the new era of personalized medicine.



Specimen Requirement

- Human whole blood: collect at least 4ml whole blood in EDTA tube (purple cap) at room temperature.
- Sample shipment: keep whole blood sample in room temperature after blood collection and throughout transportation.
- DNA preparation: extract genomic DNA from the plasma fraction of the whole blood sample on the same day of collection and store at 4°C.

Whole Blood Fractionation, Genomic DNA Extraction, Library Preparation, Next-Generation Sequencing, and Gene Mutation Analysis

- Whole blood fractionation: centrifuge and separate the whole blood into plasma, buffy coat (white blood cells & platelets), and erythrocyte fractions.
- DNA extraction: extract genomic DNA from the plasma fraction followed by DNA purification and quantification.
- Library preparation: fragment and size the genomic DNA, convert to double-stranded DNA, attach oligonucleotide adaptors, and quantitate library product.
- Next-generation sequencing: perform hotspot and exon sequencing of mutated genes of interest.
- Gene mutation analysis: annotate and compare cancer gene mutations including variants with published literature and public databases.

Analytical Methods

- Next Generation Sequencing (NGS)

Deliverables (Sent Within 14 Working Days)

An interpretative report of the cancer gene mutations will be provided.

- Targeted genes used to identify cancer mutations.
- Sequences of cancer gene mutations and their variants based on next-generation sequencing.
- Cancer mutation annotation and comparison with known datasets.
- Additional mutations gene sequencing per customer's request.

Services

Cancer Panels	Cancer Genes & Variants		Service Fee (USD/EUR)
Actionable Insights Tumor Panel V2	ALK BRAF EGFR ERBB2 ERBB3 ESR1	KIT KRAS NRAS PDGFRA PIK3CA RAF1	Inquire

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Services

Cancer Panels	Cancer Genes & Variants		Service Fee (USD/EUR)
Actionable Insights Tumor Panel V3	AKT1 ALK BRAF CTNNB1 DDR2 EGFR ERBB2 ERBB3 ERBB4 ESR1 FBXW7 FGFR1 FGFR2 FGFR3 FLT3	GNA11 GNAQ HRAS KIT KRAS MAP2K1 MAP2K2 MET NOTCH1 NRAS PDGFRA PIK3CA RAF1 SMAD4 STK11	Inquire
Customized Tumor Panel	Upon Request		Inquire