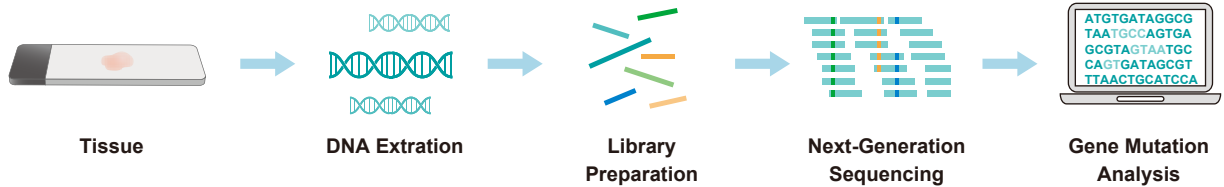


We provide an ISO15189 medical laboratory service to physicians and clinical researchers requiring formalin fixed, paraffin embedded (FFPE) tumor tissue DNA molecular characterization. Our capability is supported by a fully automated platform for FFPE tissue DNA extraction, multiplex PCR-based targeted enrichment, library preparation, next-generation sequencing, and gene mutation analysis. This robust workflow increases traceability and reproducibility, and improves quality and efficacy of cancer mutation studies. Targeted sequencing of actionable mutations have important implications in cancer diagnosis, prognosis, treatment, and monitoring in the new era of personalized medicine.



### Specimen Requirement

- Human tissue sections: 3 unstained, positively charged sequential sections from 10% formalin fixed, paraffin embedded (FFPE) tissue block. Preferred tissue fixation is 6-48hours. Recommended tissue section thickness is 4-5 microns. Tissue sections must be assayed within 6 weeks of preparation.
- Shipment: tissue sections are kept at room temperature throughout transportation.

### DNA Extraction, Library Preparation, Next-Generation Sequencing, and Gene Mutation Analysis

- DNA extraction: extract the genomic DNA from FFPE tissue followed by DNA purification and quantification.
- Library preparation: fragment and size the genomic DNA, enrich multiple PCR-based targets, pool amplicons, and prepare library.
- Next-generation sequencing: perform targeted sequencing of cancer mutations based on preselected gene panel.
- Gene mutation analysis: annotate and compare cancer gene mutations including variants with published literatures and public databases.

### Analytical Methods

- Next Generation Sequencing (NGS)

### Deliverables (Sent within 10 Working Days)

An interpretative report of 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