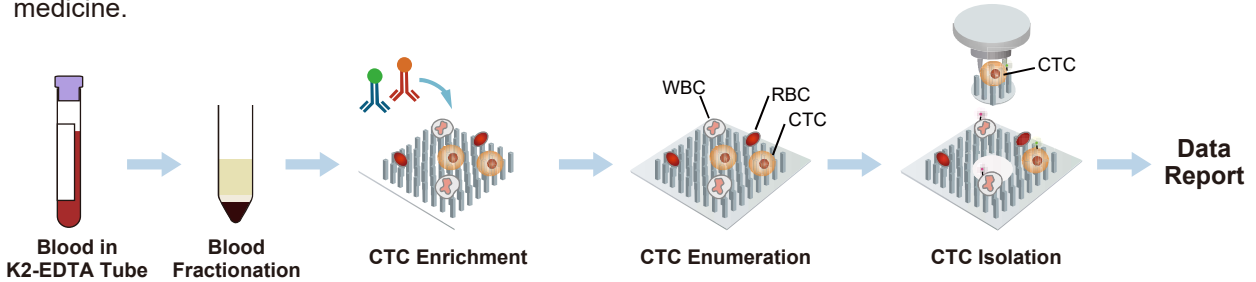


Circulating Tumor Cell Service

We provide an ISO15189 medical laboratory service to physicians and clinical researchers investigating circulating tumor cells (CTCs) in cancer patients. Our capability is supported by an integrated system for efficient and reproducible enrichment, enumeration, and isolation highly pure CTCs. Such 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: at least 7.5ml collected in K2-EDTA tube (purple cap) at room temperature.
- Shipment: sample should be kept in room temperature within 6 hours of collection and throughout transportation.

Cell Enrichment, Enumeration and Isolation

- Sample preparation: whole blood fractionation via density gradient centrifugation.
- Positive enrichment: CTC enrichment by surface antibody positive selection.
- Cell enumeration: CTC biomarker identification via immunofluorescence.
- Cell isolation: CTC cell isolation via micromanipulator for whole genome amplification (WGA) and downstream analysis.

Analytical Methods

- Immunofluorescence
- mutation specific, Fluorescence *In Situ* Hybridization (mutaFISH™)
- Array Comparative Genome Hybridization (aCGH)
- Next Generation Sequencing (NGS)

Deliverables (Sent Within 7 Working Days)

An interpretative report of the CTC sample will be provided.

- Antibody panel used to enrich CTCs.
- Number of CTCs enumerated based on biomarker identification.
- Number of CTCs isolated for downstream analyses.
- Additional protein biomarker and gene characterizations per customer's request.

Services

Items	Package 1	Package 2	Package 3	Package 4
CTC Enrichment & Enumeration	✓	✓	✓	✓
CTC mutaFISH™		✓		
CTC Cell Isolation			✓	✓
CTC WGA			✓	✓
CTC Sanger Sequencing			✓	
CTC NGS				✓
Total Price per Sample (USD/EUR)	Inquire	Inquire	Inquire	Inquire

CytoQuest™ CR system, SCx™ spiral chamber, TBx™ tension balancer, HBx™ micromixer, and TCx™ thermal control are trademarks and pending patents of Abnova Corporation.
 Cell-Surface Vimentin (CSV) antibody is a pending MD Anderson patent which has been exclusively licensed to Abnova Corporation.
 mutaFISH™ is a pending trademark and patent of Abnova Corporation.