FASTcell™ for Rare CTC Analysis

New Service Delivers Rapid, Sensitive, and Specific Single-Cell Characterization of Cancer Cells in Blood

SRI Biosciences offers a new service to detect and characterize rare circulating tumor cells (CTCs) from whole blood faster and with greater sensitivity than previously possible.

The service is based on FASTcell™ technology, which was developed in response to an urgent need for improved enumeration and characterization of rare CTCs in metastatic cancers. A Fiber-optic Array Scanning Technology (FAST™) cytometer allows identification of CTCs, detailed imaging, and isolation of individual CTCs from whole blood samples.

FASTcell™ analysis enables rapid, accurate evaluation of tumor types, including breast, lung, prostate and colorectal cancers, and leukemias.

No enrichment; not EpCAM dependent
- All nucleated cells analyzed
- All CTC types captured

Accurately enumerate CTC populations
- Rapidly scan 25 x 10^6 cells in 1 minute
- Assess CTC heterogeneity

High-resolution digital CTC images
- Evaluate differential morphology
- Determine CTC cell size and shape

Characterize single CTCs
- Multiplexed immunophenotyping
- FISH, PCR, and SNP analyses

Custom assay development
- Choose tumor-specific biomarkers
- Multiplex up to 6 biomarkers
**Immunofluorescently labeled nucleated cells captured on glass slide and analyzed using FAST™ cytometer. CTC is shown: cytokeratin/CK+ (red), CD45- (green), DAPI+ (blue).**

**Clinical Research Examples**

- **Breast Cancer Heterogeneity**
  Actionable discordance and greater heterogeneity observed in FASTcell™ CTC biomarker analysis versus primary and metastatic tumor biopsy. *(Somlo G et al. Breast Cancer Res Treat, 2011)*

- **Non-Small Cell Lung Cancer (NSCLC)**
  ERCC1 expression levels in CTCs were analyzed in metastatic NSCLC. *(Das M et al. Lung Cancer, 2012)*

**From Idea to IND and Beyond™**

SRI Biosciences is a well-established, trusted source for a wide array of contract services under the highest industry standards. With deep scientific resources and expertise, we take R&D from idea to discovery through the start of human clinical trials. SRI Biosciences specializes in cancer, immunology and inflammation, infectious disease, and neuroscience.

**Contact Us**

Investigators can request either validated testing or custom assay development by contacting SRI Biosciences.

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