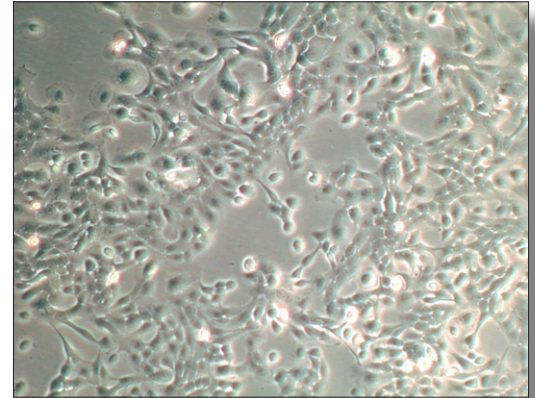


Online access to human biomaterials and data

As part of Asterand's mission to provide the highest quality human biological material and services, we have developed a web portal for simplified access to human biomaterials. Customers can access certain biomaterials online at solutions.asterand.com.

Cell lines

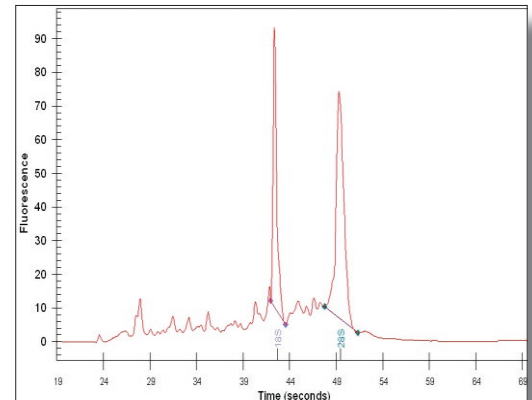
- Human breast cancer cell lines, including SUM cell lines and MCFDCIS10.com
- Human hematopoietic malignancy cell lines developed at the Karmanos Cancer Institute
- Human prostate tumor and normal cell lines developed collaboratively between Asterand and Onyvox
- Human pancreatic cancer cell lines developed at the Karmanos Cancer Institute



OPCT-3

Human RNA samples

- Isolated from oncology cases
- Unique donor per aliquot
- Agilent RIN score ≥ 6.0
- DNase treated
- Patient demographics, disease & treatment history provided
- Diagnosis confirmation of tissue by board certified pathologists
- Tumor samples with at least 70% tumor cells
- Adjacent normal samples

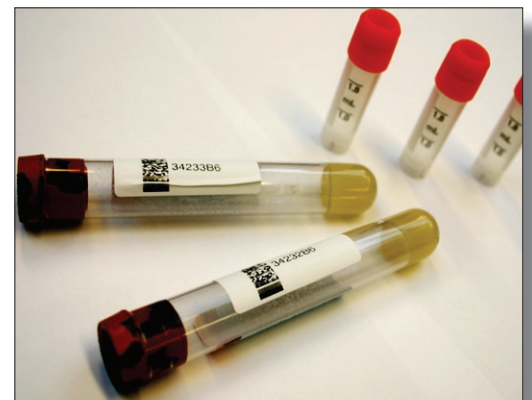


Agilent Bioanalyzer trace

Human serum

Ideal for Biomarkers discovery and validation, and available from patients with a variety of diseases, including:

- Breast cancer
- Colorectal cancer
- Lung cancer
- Pancreatic cancer
- Prostate cancer
- 1ml aliquots



Asterand blood tubes

**EXPERTS IN HUMAN
TISSUE RESEARCH**

**EXTENSIVE HUMAN
TISSUE NETWORK**

**ADVANCE PROMISING
COMPOUNDS FASTER**

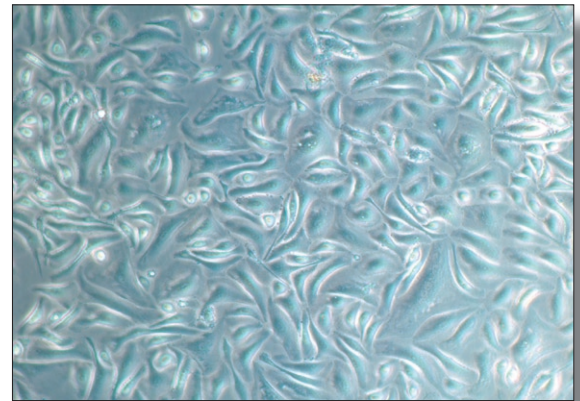
**INFORMED
DECISION MAKING**

**CONFIDENCE FOR
CLINICAL SUCCESS**

Isolated primary cells

Isolated from fresh tissue at Asterand labs, primary cells are available for research purposes.

- Chondrocytes
- Synovial fibroblasts
- Carcinoma associated fibroblasts
- Epithelial cells



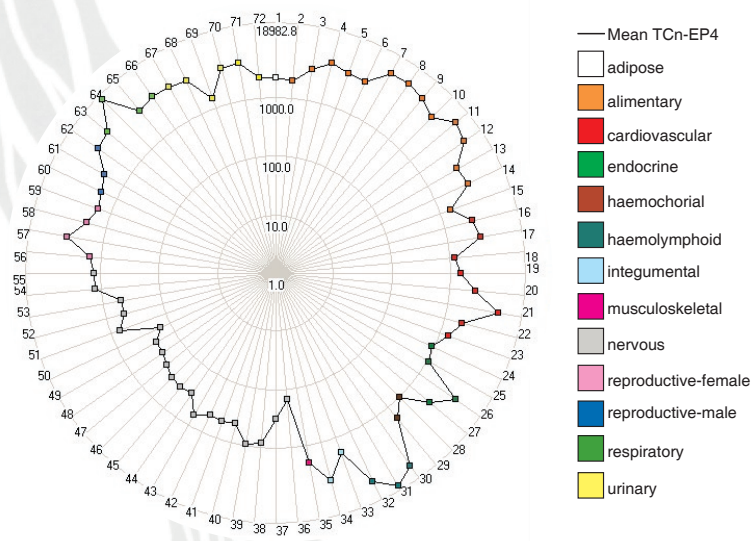
Primary epithelial cell culture

XpressWay™ Gene Expression Profiles

An XpressWay™ profile comprises gene expression data for a gene(s) of interest in 72 different human tissue types, from three donors each.* XpressWay™ profiles contain the individual data points derived from each donor sample, as well as the mean of the expression across all three donors for that tissue type. All patient clinical information available to Asterand relating to the tissue(s) used in the XpressWay™ Profile is also provided.

**Donors may not be the same among the different tissue types*

Academic pricing may be available, email us at www.academics@asterand.com.



XpressWay™-generated stellar plot of EP₄ receptor expression across 72 human tissue types (mRNA copies per 100ng of total RNA)