PROTEOME PROFILING

Quantitative Discovery Proteomics

IQ PROTEOMICS

Our comprehensive proteome profiling service provides unmatched depth and precision for characterizing changes in protein expression proteome-wide.

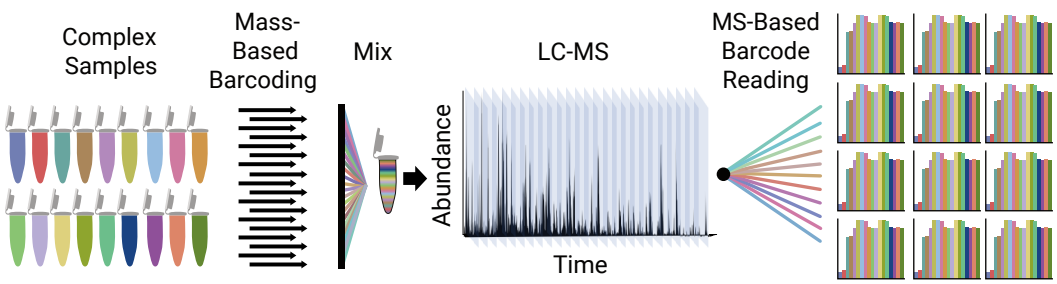
Features & Benefits

- >9500 Quantified Proteins
- >100K Quantified Peptides
- >2M Quantified Measurements
- TMT® 18-Plex Technology

Applications

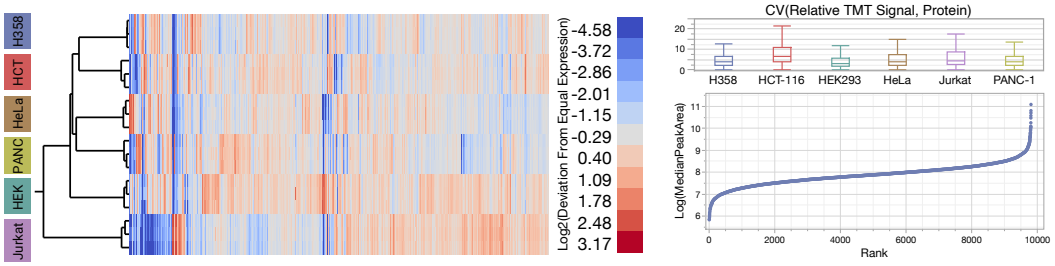
- Degradation Profiling
- Biomarker Discovery
- Large Cohort Profiling
- Cell Lines, Tissues, Biofluids

ASSAY OVERVIEW



Proteins are extracted from up to 18 samples, digested, and labeled with isobaric barcoding reagents (TMT® Pierce). Samples are mixed and analyzed in a single LC-MS run using Orbitrap (® Thermo) instruments. Quantification is achieved via MS-based barcode reading using an SPS MS3 method leveraging real-time, intelligent data acquisition to ensure the highest data quality.

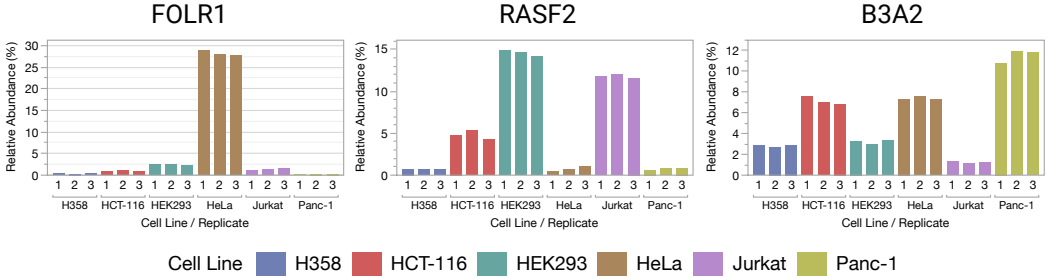
DATA OVERVIEW



9562 Protein Groups Quantified **127149** Peptides Quantified **0** Missing Values

Six cancer cell lines, each in triplicate, were prepared and analyzed by multiplexed, quantitative LC-MS. Evaluation of the quantitative profiles for the 9562 proteins quantified in this study reveals dominant cell line related changes, complemented by precise reproducibility among the biological triplicates within each cell line. Quantitative robustness enables accurate measurements exceeding 60-fold changes in protein expression and an average coefficient of variation (CV) less than 5%. Greater than 5 logs of dynamic range enables comprehensive proteome coverage

DATA SPOTLIGHT



Analysis of individual proteins reveals precise measurements of both large and subtle expression level changes distinguishing between cell lines. Excellent agreement between replicates and the absence of missing values empowers confident interpretation of cell-line differentiation factors. Together, robust quantification, deep proteome coverage, and on-time delivery empowers research though actionable datasets.

IQ PROTEOMICS

39 Grant Street - Framingham, MA 01702 www.iqproteomics.com info@iqproteomics.com