

Quantitative Proteomics



Label-Free

Spectral
Counting



SILAC

Metabolic
Labeling



TMT/iTRAQ

Isobaric
Tags



Acquisition

Data
Strategies

Label-Free Quantification

- Spectral counting
- Peak intensity measurement
- No labeling required

SILAC Labeling

- Metabolic incorporation
- Heavy amino acids (^{13}C , ^{15}N)
- Cell culture applications

TMT/iTRAQ Tags

- Isobaric mass tags
- Multiplexing 6-16 samples
- Reporter ion quantification

DIA vs DDA

- DIA: all ions fragmented
- DDA: targeted selection
- Trade-offs in coverage and reproducibility