CUSTOM ASSAY DEVELOPMENT AND SAMPLE ANALYSIS

PRECION

Experts in Custom Biomarker Assay Development and Sample Profiling

Precion specializes in the development, validation, and profiling of LC-MS/MS based small molecule biomarker assays.

With decades of experience, the Precion team has developed metabolite biomarkers covering hundreds of metabolites from all chemical classes.

In-house synthesis capabilities for stable labeled internal standards adds to accurate, dependable, and reproducible results.

Applications

- Assays are validated following the fit-for-purpose (FFP) approach, with the level of assay characterization determined by the expected content of use of the data
- Tested Parameters include accuracy precision of calibrators, QCs, specificity, selectivity recovery, stability, carry-over, and others as required

Precion Platforms Include

- Sciex Exion UHPLC
- Sciex 5500+ Triple Quadrupole Mass Spectrometer
- Sciex 7500 Triple Quadrupole Mass Spectrometer

Key Advantages

- Precion leverages LC-MS/MS, the "gold standard" methodology, in quantitative analysis of small molecular biomarkers
- Compared to traditional clinical chemistry assays, **LC-MS/MS assays are superior in both sensitivity and selectivity**
- Molecular mass and fragment-mass based detection is universally applicable to the chemically diverse space of small molecules and allows the parallel measurement of many analytes (multiplexing)
- Precion specializes in multiplexed assays custom-tailored to address the physiochemical diversity of metabolites
- Robust equipment is used for obtaining **sensitive, selective, accurate, and precise measurements**
- Assays are run with a minimum of 6 to 8 calibrators per analyte
- Precion uses matching stable labeled internal standards for each analyte, which are synthesized in house if not commercially available
- Calibrator and quality control sample precision (% CV) typically <10%
- Requires low sample volume

Custom Assay Development Process

01 / ASSAY DEVELOPMENT

Precion's objective in custom assay development is to meet your specific requirements

02 / ASSAY VALIDATION

Assay validation assures results are accurate and reproducible

03 / SAMPLE ANALYSIS

Precion is flexible in their ability to utilize many different sample types which can easily be scaled in both large and small amounts

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