



**DRUG DEVELOPMENT
SOLUTIONS**
Part of Alliance Pharma, Inc.

Peptide Therapeutics

Our industry leading bioanalytical solutions have helped our clients develop new peptide therapeutics to improve the quality of life.

Offering high specificity and a wide range of biological targets, peptides have a long history of utilisation as therapeutics.

Advances in peptide chemistry have further fuelled growth in this market, resulting in a diverse and complex set of modalities, which we have become experts in offering bioanalytical solutions to our clients using LC-MS/MS technology.

LC-MS/MS bioanalysis of peptides

High sensitivity methods are often required for peptide bioanalysis owing to their enhanced efficacy – applying our experience and cutting-edge technology we have developed and validated methods using LC-MS/MS to quantify levels of peptides in plasma at levels as low as 10 pg/mL

Assay selectivity can often pose a limitation to achieving lower detection limits with peptides, owing to other closely related species. We are able to offer high resolution MS capabilities to enhance assay selectivity and drive down detection limits.

Often the amino acid composition within peptides or their specific conjugation to other modalities can lead to undesirable binding with labware during extraction or LC-MS/MS measurement. Our team can rapidly predict/ diagnose these issues and implement solutions to deliver robust methodologies.

Peptides can often be susceptible to degradation, due to the presence of a wide range of endogenous peptidases. We possess experience in assessing their stability and can advise our clients on pre-analytical stabilisation techniques to control this.



LC-MS/MS bioanalytical solutions

Internal standards

We strongly recommend purchasing a stable isotopically labelled internal standard early in the development of the methodology. We have partnerships with established suppliers and can readily source reference materials of exceptionally high standards. This approach has the potential to save a significant amount of time during the method development stage.

Sample extraction

Peptides can be challenging to remove from the matrix prior to the sample analysis phase. This is primarily due to the chemical similarity of the target molecules with endogenous components. We have experience in using a number of techniques ranging from 'soft' protein precipitation, solid phase extraction and immunoprecipitation.

Our integrated services include

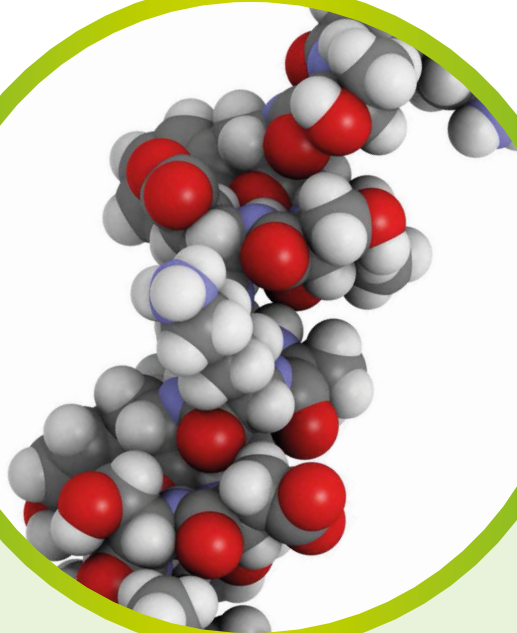
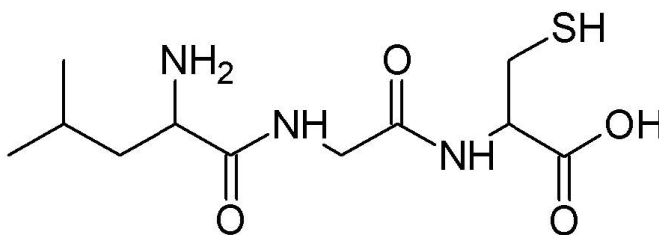
- » Fast method development for discovery compounds
- » Method development and validation for GLP TK studies and GCP clinical trials
- » Fast turnaround for Phase I Clinical Studies
- » Logistical support for clinical sample management including sample collection kit production and supply of sampling kits, labels, investigator manual and shipping.

Our team and experience

Drug Development Solutions' Bioanalysis group has a unique 50+ year history that has fuelled our growth into a leading specialist bioanalytical provider. Based in Cambridge, (Fordham) our LCMS/MS bioanalysis group consists of almost 80 scientists, with a specialist Centre of Excellence for Protein LC-MS

High quality reporting and data management

- » Rapid turnaround of analytical data, draft and final reports, using our templates or yours
- » Specialist software to support SEND/SDTM data requirements
- » eCTD compliant reports
- » PK/TK profiling and reporting using WinNonlin™
- » Certified as GLP and GCP compliant by MHRA, successful EMA audits
- » Dedicated independent Quality Assurance, pharmacokinetic and data management personnel.



Let's discuss your project:
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