

ALTA BIOSCIENCE LTD

Overview Brochure

Technical Document

Recognised worldwide as a leading manufacturing and analytical testing laboratory, AltaBioscience specialises in the custom syntheses of DNA primers, peptides, monoclonal and polyclonal antibodies. Our laboratories, established in 1973 in Birmingham, provide analytical testing including amino acid analysis, protein sequencing and mass spectrometry services ensuring a wealth of expertise for our customers.



Why use AltaBioscience?

Accredited to ISO/IEC 17025:2017 for amino acid analysis and protein sequencing, and certified to ISO 9001:2015 for the laboratory as a whole, AltaBioscience is committed to supplying high-quality products and analytical services at competitive prices.

Our staff comprise of highly qualified individuals with BSc, MSc and Ph.D. degrees in chemistry and life sciences. They possess many years of working in peptide chemistry and other related areas.

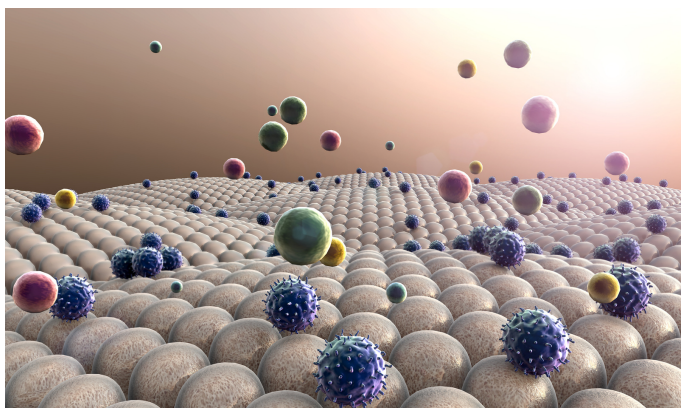
With a strong focus on scientific excellence and over 40 years of expertise, we work closely with our customers to ensure we meet all their requirements.

- Custom Peptide Synthesis
- Custom DNA Peptide Conjugate Synthesis
- Tags & Conjugations
- DNA/Oligo Synthesis
- Custom Antibody Generation
- Amino Acid Analysis
- N-Terminal Edman Protein Sequencing
- HPLC and MS Analytical Testing

Advancing science through analytical chemistry and synthesis services in the life and food science sectors worldwide

Custom Biochemical Synthesis

AltaBioscience is an ISO 9001:2015 certified laboratory providing high-quality custom services for peptide synthesis, DNA oligo primers and monoclonal and polyclonal antibodies. With specialist equipment and experienced chemists, we are able to meet the ever-increasing needs in biopharma and drug discovery research.



Custom Peptide synthesis

We specialise in the supply of custom peptides synthesised with a broad range of scale and purity options. With more than 40 years' experience, our team of peptide chemists ensure a fast turnaround of high-quality peptides.

- ◈ Linear and cyclic peptides
- ◈ Peptide antigen synthesis
- ◈ Peptides with dyes and modifications
- ◈ Peptide libraries and microarrays

mg to kg amounts

Specialist expertise for difficult or challenging syntheses

Peptide Libraries and Microarrays

We have expertise in synthesising three types of peptide library:

- ◈ Peptide mixtures
- ◈ Episcan peptide libraries with up to 576 peptides produced in one synthesis batch
- ◈ Peptides microarrays by printing up to 192 peptides directly onto coated glass slides.

Testing and scanning of multiple peptides for fast efficient low-cost studies

Ideal for epigenetic, protein-peptide interactions and epitope scanning studies

Custom Polyclonal and Monoclonal Antibodies

We offer a full range of polyclonal and monoclonal antibody production services including:

- ◈ Peptide antigen design, synthesis and conjugation
- ◈ Custom polyclonal and monoclonal antibodies
- ◈ Affinity purification of serum

Flexible options for full or part service

UK based provider to enable fast turnaround

DNA Oligonucleotide Synthesis

We specialise in a fast syntheses and delivery of custom primers and oligos for research use.

- Wide range of sequence modifications
- Synthesis scale of 0.05 μmol to 15 μmol
- Purification options
- 24 hr turnaround

Fast turnaround for custom

primers, DNA probes, ssDNA oligos

Options for DNA-peptide conjugation

DNA Oligo-Peptide Synthesis

We synthesise peptide and DNA independently using solid phase techniques then couple them either at the 3' end of the oligo or at the 5' prime end depending on your requirements.

Choice of conjugation method to suit your needs

Options to modify the peptide or DNA molecules



Stock Peptides

As well as providing custom peptide synthesis services, AltaBioscience supplies a range of stock peptides either as individual purified peptides or as peptide sets available in the following formats:

- Individual glass microarray slides
- Immobilised on streptavidin coated micro-titre plates
- Ready to use kits
- Unbound peptides in deep well micro-titre trays

Products available include:

- ◆ Histone peptides from H3, H2a, H2b and H4
- ◆ Histone peptide arrays containing 94 individual peptides
- ◆ Cell penetrating peptides
- ◆ Epstein-Barr and influenza peptides

- ◆ AMP-activated protein kinase SAMS peptide
- ◆ Beta amyloid peptides
- ◆ Ghrelin peptides
- ◆ Anti trypsin (PR3)
- ◆ LL37

Exclusive licensee for patented histone peptide microarrays

Hundreds of post-translational modifications available

Individual purified peptides supplied with HPLC and mass spectroscopy data.

Ready to ship

Analytical Services

AltaBioscience offer a selection of analytical services across an extensive range of applications. Our highly experienced and skilled scientists, along with our laboratory accreditation and certification, ensure that our clients have the utmost confidence in the results produced.

Amino Acid Analysis



Accredited to ISO 17025:2015 we use the most robust analytical methodology, ion exchange chromatography, followed by photometric detection. Unlike other methods, this enables us to quantify amino acids from samples without the need for high purity levels.

Protein Sequencing



We offer sequencing of amino acid analysis in proteins and peptides accredited to ISO 17025:2005. Using the robust and accurate N-terminal Edman sequencing method which, unlike mass spec techniques, provides an unambiguous sequence read. Samples can be submitted as gel slices, on blots or as solids or solutions.

Accredited to ISO 17025:2015
Suitable to a wide variety of sample types

Accredited to ISO 17025:2015
Highly experienced technical interpretation

Peptide/Protein Mass Fingerprinting



Using automated robotic systems and high-performance mass spectrometers, we provide a fast analytical service for identification of proteins. All raw data is provided and a database comparison is included in the service.

HPLC and Mass Spectrometry



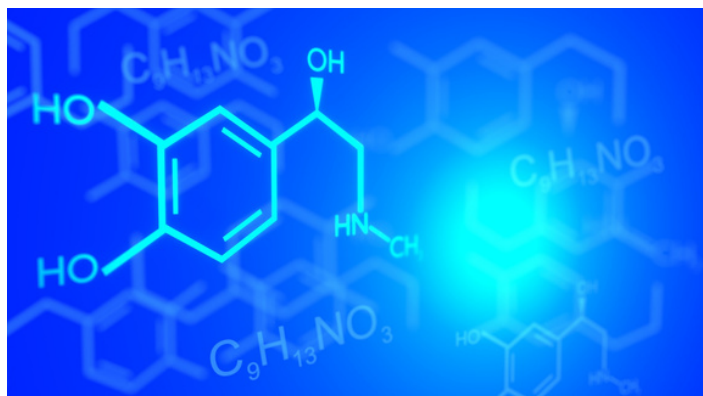
We provide mass spectrometry analysis for accurate measurement of the molecular weight of peptide and proteins. HPLC services are also available for purification of peptides.

Full spreadsheet of all data provided
Analysed using state of the art mass spectrometers

IMALDI/Electrospray (ESI) options
Intact mass determination or tryptic digest options

About AltaBioscience

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CONTACT US

For detailed information on each of the products and services offered by AltaBioscience, please contact us on

+44 (0) 1527 584495 or email us at
info@altabioscience.com

Alternatively, you can visit our website

www.altabioscience.com