

Protein Identification	
Service Title	Non-quantitative mass spectrometry based proteomics
Workflow Code	MASS_LCMS
Short Service Description	Database dependent identification of purified proteins from complex mixtures using nano-LC MALDI
Base Price (Price per unit)	Price on enquiry
Turn Around Time	3 weeks
Detailed Description and background	
<p>Digested proteins are separated using multidimensional liquid chromatography and automatically spotted onto a MALDI source plate. The fractions are subjected to MS and MS/MS analysis. The data acquired are subjected to database interrogation using ProteinPilot. In planning and conducting experiments, the CPGR applies G(C)LP principles to ensure that analytical workflows are developed and validated to meet the requirements of type of tissue employed and biological question asked. Experiment design is supported by on-site bio-statistical and bioinformatics expertise to ensure a high level of integration of cross-disciplinary knowledge and dependable outcomes. Raw data generated can feed into further down-stream statistical and bioinformatics analysis, including pathway analysis, data visualisation. Putative protein or peptide ID's can be utilised further to generate to develop assays for validation purposes using the CPGR's protein, peptide or antibody array workflows.</p>	
Service Details	
<p>Extracted protein samples or tissue samples may be submitted for protein extraction and digestion. After digestion the peptides are separated using two dimensional liquid chromatography and spotted on a MALDI source plate. The data acquired from the MS/MS data acquisition are submitted for database interrogation using ProteinPilot software</p>	
Service Deliverable	
<p>Report includes database search results as well as control data for the experiments</p>	
Sample/Info Submission Info	
<p>Single samples can be submitted for digest and analysis.</p>	
Pricing Details	Price on request
Key Words	Peptide Mass Fingerprinting, Protein Identification, MALDI, MS/MS Biomarker discovery
Sample Shipping Address	Institute of Infectious Disease and Molecular Medicine, UCT, Faculty of Health Sciences, Wernher and Beit Building, Level 2, Lab S2.09, Anzio Road, Observatory, Cape Town 7925, South Africa
Related services	Bioinformatics, protein arrays, protein expression, Luminex

