

مختبر البحث المركزي

Central Research Laboratory (CRL)

Biochemistry & Proteomics Department

Test Type	Note
Detection and Measurement of Biomarkers by Enzyme-linked Immunosorbent Assay (ELISA).	The test kit must be provided by the researcher
Detection and Measurement of Biomarkers by Bio-Rad (Bio-Plex 200 system). The price per kit	The kit is provided by researcher. Please note that researchers will be charged for calibration kits. The assay run will be provided free of charge
Detection and Measurement of Biomarkers by Semi-Automated Biochemistry Analyzer by SFRI (BSA 3000)	The test kit must be provided by the researcher
Detection and Measurement of Biomarkers by Roche (Reflotron Plus)	The test strips must be provided by the researcher
Absorbance Microplate Reader (from 400-700 nm) by Tecan (Sunrise)	Price for a 96-well plate
Characterization of Nanoparticles- Size by Malvern (Zetasizer ultra)	
Characterization of Nanoparticles -Zeta Potential by Malvern (Zetasizer ultra)	

Test Type	Note
Protein Extraction by PBS or RIPA(0.2 g), (Tissue Lyzer LT;Model No.:E97600267 by Qiagen)	
Protein Extraction by Trizol	
Protein Concentration Measurement by Nanodrop, (Nanodrop 2000 spectrophotometer by Thermo Scientific)	
Protein Quantitation (Lowry Assay), (Cary Series UV/VIS/NIR Spectrophotometer (Model No.: Cary 6000i by Agilent Technologies)	The listed price covers the measurement of the concentration for the initial sample along with its standard curve. Subsequently, a fee of 6 SR will be charged for each additional sample analysed
Protein Quantitation (Bradford Assay), (Cary Series UV/VIS/NIR Spectrophotometer (Model No.: Cary 6000i by Agilent Technologies)	The listed price covers the measurement of the concentration for the initial sample along with its standard curve. Subsequently, a fee of 6 SR will be charged for each additional sample analysed
Protein Separation by Polyacrylamide Gel Electrophoresis (PAGE): (SDS - Native PAGE - Other), (Mini-Protean Tetra Cell by Bio-Rad), (GS-900 Calibrated Densitometer (Model No.: GS-900 by Bio-Rad)	Price for a single gel, accommodating up to 9 samples

Test Type	Note
Gel Imaging System (GS-900 Calibrated Densitometer (Model No.: GS-900 by Bio-Rad)	Price for a single gel, accommodating up to 9 samples
Western Blot (Trans-Blot Turbo Transfer System by Bio-Rad), ChemiDoc MP Imaging System (Model No.: Universal Hood III, by Bio-Rad)	Price for a single gel, accommodating up to 9 samples
Western Blot (Trans-Blot Turbo Transfer System by Bio-Rad), ChemiDoc MP Imaging System (Model No.: Universal Hood III, by Bio-Rad)	The researcher provides the kits and consumables
Western Blot Reused Membrane, (ChemiDoc MP Imaging System (Model No.: Universal Hood III, by Bio-Rad)	Price for a single gel, accommodating up to 9 samples
Silver Stain Kits for Protein	
Ultra Pressure Liquid Chromatography UPLC/MS/MS/Q-TOF, (Xevo-TQD by Waters) - (Xevo G2-s QTOF by Waters)	column type BEH C18 1,7Uum 2.1 mm
High Pressure Liquid Chromatography (HPLC), (Infinity 1290 by Agilent Technologies)	column type C18 4,5um .10mm
Spectrophotometer (F-UV-UV-vis-IR), (Cary Series UV/VIS/NIR Spectrophotometer (Model No.: Cary 6000i and Cary Eclipse by Agilent Technologies)	For samples with an unknown concentration, the rate is 30 SR per hour

Chemistry & NMR Department

Test Type	Note
Thermo Gravimetric Analyzer, PYRIS 1 TGA, Perkin Elmer (TGA)	<p>Please note that the sample will be considered as a new sample in the case of changes of any of the followings:</p> <ul style="list-style-type: none"> •Rate of velocity •Type of analysis •Type of gas
Separate and determine component by Ultra- Performance Liquid Chromatography, XEVO-TQD, Waters (UPLC/MS/MS)	For samples where both the method and concentration are unknown, the charge is 60 SR for a 3-hour session. If the researcher supplies their own column, the cost for processing the sample will be reduced by half
separate and determine component by High Pressure Liquid Chromatography, series200, Perkin Elmer (HPLC)	For samples where both the method and concentration are unknown, the charge is 60 SR for a 3-hour session. If the researcher supplies their own column, the cost for processing the sample will be reduced by half

Test Type	Note
Separate and determine component by Gas Chromatography, Clarus500, Perkin Elmer (GC-FID)	
Separate component by Gas Chromatograph-Mass Spectrometer,7890B Agilent Technologies (GC- MS)	
Separate and determine component by Liquid Chromatograph-Mass Spectrometer,6460 Triple Quad LC/MS,Agilent Technologies (LC-MS- MS)	For samples where both the method and concentration are unknown, the charge is 60 SR for a 3-hour session. If the researcher supplies their own column, the cost for processing the sample will be reduced by half

Test Type	Note
Total organic carbon,MULTI N/C 3100/1,Analytik Jena	
determination of elements by Atomic Absorption Spectrophotometry,240FS,Agilent Technologies (one element for one sample)	
Digestion Microwave,ETHOS One,Milestone (10 sample per run)	
Spectrophotometer (Fluorescence,G9800A,Agilent Technologies Vis,Lambda25,Perkin Elmer NIR,Lambda750,Perkin Elmer 100,Perkin Elmer	,UV- , UV-Vis- , FT-IR,Spectrum For samples with un determined concentration the rate is 30 SR per hour
Nuclear Magnetic Resonance (NMR) Unit	
Resonance Spectroscopy,600Mhz,Agilent Technologies (NMR) 1D- NMR	
2D-NMR	

Electron Microscopy Department

SEM Unit

Test Type	Note
Examination Surfaces of non-biological samples Without Chemical Treatment JEOL 6060 LV SEM	10 images/sample
Examination Surfaces of biological samples With Chemical Treatment JEOL 6060 LV SEM	10 images/sample
Examination Surfaces of non-biological samples Without Chemical Treatment JSM-JEOL7610F	10 images/sample
Examination Surfaces of biological samples With Chemical Treatment JSM-JEOL7610F	10 images/sample
Examination Surfaces of non-biological samples EDX	10 images/sample
Imaging Only JSM-JEOL7610F	
Imaging Only JEOL 6060 LV SEM	

TEM Unit	
Test Type	Note
Chemical Treatment Only of biological specimen	15 images/sample
Chemical Treatment, Sectioning, staining and imaging of biological specimen	
Sectioning and staining of biological specimen	
Negative Staining and Imaging	
Loading for Negative Staining Sample	
Sample Preparation of Non- biological specimen and Imaging	
Loading only of non-biological specimen	15 images/sample
Imbedding, cutting and imaging for polymer sample	
Imaging Only	

Microbiology Department

Test Type	Note
Automated Microbiology Identification System "Phoenix 100"	
Spectrophotometry measurement	Cuvette or multi-well plate
Subculture on a plate agar or broth	
Gram Staining	
Growth curve	
Minimum inhibitory concentration (MIC)	
Minimum bactericidal concentration (MBC)	Per 12 agar plates
Dilution preparation of reagents	Up to 3 reagents
Disc diffusion method for antibiotic susceptibility testing-antibiotics from the department	Up to 6 antibiotics
Disc diffusion method for antibiotic susceptibility testing-Antibiotic or chemical provided by researcher	
SEM processing before imaging	This applies only if samples are taken from MIC.
Biochemical methods (Analytical Profile Index) 20E Test	

Microbiology Department

Test Type	Note
Biofilm	1-5 days incubation
Plate Count	
Ultracentrifuge (NVT65)	
Ultracentrifuge (SW 55Ti)	
Ultracentrifuge (SW 40 Ti)	
Ultracentrifuge (100 Ti)	
Ultracentrifuge (70 Ti)	

Microbiology Department

Test Type	Note
MIC + MBC	
1- MIC determination (Manually), 2- Disc diffusion method with antibiotic from the department, 3- Automated Microbiology Identification System "Phoenix 100".	
1- MIC determination (Manually), 2- Disc diffusion method with an extract from the researcher 3- Automated Microbiology Identification System "Phoenix 100".	
Manual Identification of characteristic microorganisms (culture/Microscopy/biochemical methods/&PCR	

Microbiology Department

Test Type	Note
PCR (POLYMERASE CHAIN REACTION)	
PCR from the sample (Glycerol, Pick, Colony and grow)	
Agarose Gel Electrophoresis	
Genomic DNA extraction	
PCR purification or gel extraction kit	
Microbial DNA extraction Total:	For Free if the researcher brings the chemical, consumables, and kits
from the sample (Glycerol, agar plate)	
Purity DNA	
Work space Rental	
Monthly	The minimum period is three months
year	

Tissue & Cell Department	
Test Type	Note
Histology Unit	
Processing of Tissue Specimen (Automated Tissue Processor, Lieca-TP1020)	
Paraffin Embedding (Tissue embedding station, Lieca-EG1160)	
Paraffin sectioning (Rotary Microtome, Lieca-RM2255)	
Staining, mounting and Coverslipping (Automated Multi-stainer, Lieca-AUTOSTAINER XL; Automated Cover Slipper, Lieca-CV5030)	
Histological service package including processing, paraffin embedding, sectioning, staining, mounting and coverslipping (Automated Tissue Processor, Lieca-TP1020; Tissue embedding station, Lieca-EG1160; Rotary Microtome, Lieca-RM2255; Automated Multi-stainer, Lieca-AUTOSTAINER XL; Automated Cover Slipper, Lieca-CV5030)	

Test Type	Note
Light Microscope Imaging 5 images/Stained sample (Leica-DM4000 B LED/With digital camera)	
Florescent Microscope Imaging 5 images/Stained sample (Leica-DM3000 B LED/With digital camera)	
Histological service package for Immunohistochemistry including processing, paraffin embedding, sectioning, and loading on frost slide (Automated Tissue Processor, Lieca-TP1020; Tissue embedding station Lieca-EG1160; Rotary Microtome Lieca-RM2255)	
Automated Immunohistochemistry Staining (Dako Auto-stainer AL204) Note: The sample provided on frost slide by the researcher	The Primary and secondary antibodies provided
Laser Capture Microscopy (Life technology, Arcturust XT)	
Cryosectioning including sectioning, staining, mounting and coverslipping, (Cryostat, Leica CM1850UV-7-1) Automated Multi-stainer, Lieca-AUTOSTAINER XL; Automated Cover Slipper, Lieca-CV5030)	

Test Type	Note
Multiplex Assay by Luminex MiliQ	The kit must be provided by researcher. Please note that researchers will be charged for calibration kits. The assay run will be provided free of charge
Cytotoxicity Assay (CellTiter 96 Aqueous One Solution Cell Proliferation Assay, Promega)	A single treatment will be administered to each cell line, with durations specified as either 24, 48, or 72 hours
Florescent Microscope Imaging (Lieca-DMI3000, with digital camera) 5 images/Staind sample	
Light Microscope Imaging (Lieca-DMI3000, with digital camera) 5 images/Staind sample	
Cell Line Passage	
Customized Cell Treatment	The treatment must be provided by the researcher
Isolation and Subculturing of primary cells from fresh tissue	
Tissue Homogenization Provided the Tissue in Phosphate Buffer Saline	
Cell Counting for Trypan Blue Stained cells (Invitrogen COUNTESS)	

Test Type	Note
<p>UV/VIS spectrophotometric assays (SpectraMax Plus 384 Microplate Reader, Molecular Devices)</p> <ul style="list-style-type: none"> • DNA quantitation • Colorimetric assays • ELISAs/EIAs • Immunoassays • Drug dissolution profiles • Enzyme kinetics <p>Filter range (190–1000 nm)</p>	<p>The price for 96 well plate</p>
<p>UV/VIS spectrophotometric assays (SpectraMax Plus 384 Microplate Reader, Molecular Devices)</p> <p>Filter range (190–1000 nm) , overnight incubation</p>	

Test Type	Note
Live Cell Imaging 24hrs/ Stained Sample	
Supervised Confocal Imaging 1hr/ Stained Smalpes (Laser Scanning Microscope (CLSM) Ziese	
Unsupervised Confocal Imaging 1hr/ Stained Smalpes (Laser Scanning Microscope (CLSM) Ziese	

Genetics Department

Test Type	Note
Molecular Genetics Unit	
DNA Extraction (Extraction from blood/tissues/saliva)	
RNA Extraction (Extraction from blood/tissues/saliva)	
DNA/RNA measurement by Nanodrop 2000 spectrophotometer by Thermo Scientific	
Reverse Transcriptase PCR	
Polymerase Chain Reaction (PCR) by Veriti 96 well Thermal Cycler by Applied Biosystems	
Agarose Gel Electrophoresis (Per one Gel) by PS 300 T Mini power pack by Biometra An Analytik Jena Company/ Gel Doc XR+ by BioRad/BioDoc Analyze Biometra	The gel contains one DNA marker ladder, and if the researcher want to add a marker 6 SR will be added to the total cost

Test Type	Note
Real Time PCR (Genotyping) by Viia 7 by life technologies/ Applied Biosystems.	Genotyping involves analyzing single nucleotide polymorphisms (SNPs) at the DNA level.
Real Time PCR (Gene Expression) by Viia 7 by life technologies /Applied Biosystems.	
DNA Sequencing by 3500 Genetic Analyzer by Applied Biosystem	Gene expression involves analyzing genes at the RNA level.
Use the device only (if the researcher provides chemicals, consumables and kits)	
Real Time PCR instrument by Viia 7 by life technologies/ Applied Biosystems	Price per one run
Thermocycler (PCR) by Veriti 96 well Thermal Cycler/ Applied Biosystems	price per on run
Gel Documentation system with CCD camera using Gel Doc XR+ by BioRad/ BioDoc Analyze Biometr	price per single image

Test Type	Note
FACS Aria III - Analysis	
FACS Aria III – sorting	
PBMC isolation	
Cell Surface Staining (depending on antibody)	To be determined after selection
Cell Cycle Analysis	
Apoptosis and Cell Viability	
Flow cytometry Panel design	
Data Analysis by Flow Jo per /hour	
Rental Services	
Daily	
Weekly (Sunday-Thursday)	
Monthly	
Flow cell acquiring only samples / hour	

Work Space Rental

This service aimed to provide a workspace for the researcher/postgraduate student in the specialized laboratory to work alone through daily/weekly/monthly rent.

The service price includes: a workspace, consumables, cabinet, and 5 supporting devices