














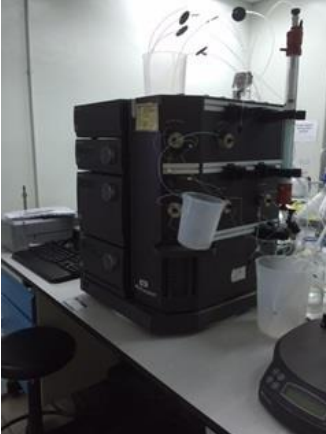




1. LABORATORI BIOUBATAN MOLEKUL (MOLEMED)




| BIL | NAMA ALAT / PERKHIDMATAN / PRODUK | GAMBAR | HARGA ALAT (RM) |
|-----|-----------------------------------|--|-----------------|
| 1 | High pressure homogenizer |  | 148,900.00 |
| 2 | Zeta sizer |  | 275,020.00 |
| 3 | Chemistry analyzer |  | 268,000.00 |
| 4 | Freeze dryer (pilot scale) |  | 517,400.00 |

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|---|--|--|--|------------|
| 5 | Electron spin resonance (ESR) | |  | 439,000.00 |
| 6 | DNA sequencer | |  | 800,000.00 |
| 7 | GenomeLab Genetic Analysis System (GeXP) | |  | 750,000.00 |
| 8 | Flow Cytometer | |  | 795,000.00 |
| 9 | Densitometer | |  | 140,000.00 |

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| 10 | Flourescense microscope |  | 149,856.00 |
| 11 | Multimode microplate reader |  | 127,895.00 |
| 12 | Real-Time PCR (RT-PCR) |  | 155,000.00 |
| 13 | Robotic |  | 600,000.00 |
| 14 | GCMS-QQQ |  | 748,558.00 |




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|----|---|--|--|--|--------------|
| 15 | Subcritical Water and Accelerated Solvent Extraction System | |  | | 300,000.00 |
| 16 | Akta Explorer | |  | | 324,800.00 |
| 17 | Bioreactor | |  | | |
| 18 | Single Crystal Diffractometer | |  | | 2,489,900.00 |


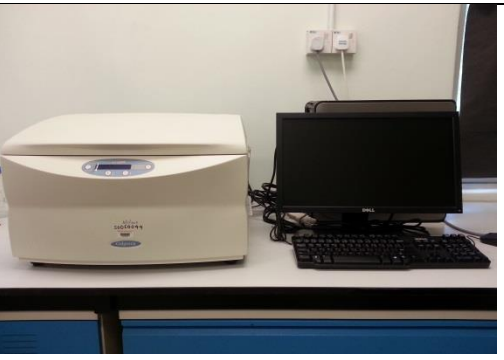


2. LABORATORI BIOTEKNOLOGI MARIN (MARSLAB)






| BIL | NAMA ALAT / PERKHIDMATAN / PRODUK | GAMBAR | HARGA ALAT (RM) |
|-----|--|--|-----------------|
| 1. | Gas Chromatography coupled Mass Spectroscopy (GCMS) HP 6890/HP 5973 Series |  | 300,000.00 |
| 2. | Total Organic Carbon Analyzer, Shimadzu Model TOC-5000A |  | 184,476.00 |
| 3. | Digital microscope (Keyence VHX-500K) |  | 230,000.00 |


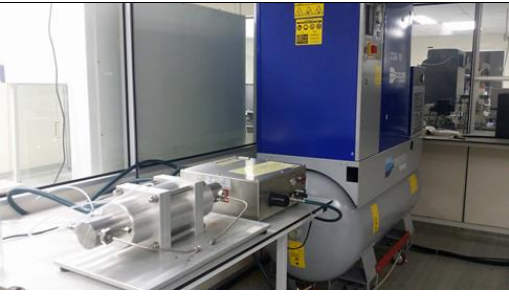


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| 4. | Real-time PCR Machine Model Rotor Gene Q 5 Plex HRM |  | 160,000.00 |
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3. LABORATORI VAKSIN DAN IMMUNOTERAPEUTIK (LIVES)



| BIL | NAMA ALAT / PERKHIDMATAN / PRODUK | GAMBAR | HARGA ALAT (RM) |
|-----|--|--|-----------------|
| 1 | Atomic Absorption Spectrometer (AAS) |  | 345,230.00 |
| 2 | Chemiluminescence Imaging System (Chemi-doc) |  | 167,478.00 |
| 3 | High Speed Centrifuge |  | 398,000.00 |

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| 4 | Ultracentrifuge (Beckman) |  | 110,000.00 |
| 5 | Infrared Imaging System (Licor Odyssey) |  | 169,980.00 |
| 6 | Microwave Digester |  | 115,000.00 |
| 7 | Next Generation Sequencer (MiSeq) Access/Running Fee |  | 548,150.00 |


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| 8 | Real-time PCR (qPCR) System Access Fee |  <p>A photograph of a real-time PCR (qPCR) system. It consists of a light green and white thermal cycler machine with a touchscreen interface, placed on a wooden desk. To the left of the machine is a black computer monitor, keyboard, and mouse.</p> | 179,000.00 |
| 9 | Zeiss KS Elispot System |  <p>A photograph of a Zeiss KS Elispot system. It features a microscope with a camera attachment, positioned on a desk. A computer monitor and keyboard are visible in the background.</p> | 120,000.00 |
| 10 | Fourier transform infrared spectroscopy (FT-IR) |  <p>A photograph of a Fourier transform infrared spectroscopy (FT-IR) instrument. The machine is white and blue, with the brand name 'VERTEX 70' visible on the front. It is placed on a desk next to a computer monitor and keyboard.</p> | 198,070.00 |
| 11 | Fully Automated Surface Plasmon Resonance (SPR – BIACORE) |  <p>A photograph of a fully automated surface plasmon resonance (SPR) instrument, specifically a Biacore system. The machine is black and white, with a glass viewing window. It is situated on a desk with a computer monitor and keyboard nearby.</p> | 998,628.00 |
| 12 | High Performance Liquid Chromatography (HPLC) |  <p>A photograph of a high performance liquid chromatography (HPLC) system. The equipment is white and grey, consisting of multiple modules. A computer monitor and keyboard are visible on the desk to the right.</p> | 214,210.00 |




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| 13 | High Pressure Chromatography Protein Purification & Analyzing System (Akta Explorer) |  | 445,926.00 |
| 14 | High Pressure homogenizer (lab scale) |  | 287,438.00 |
| 15 | Lab Scale Fermenter System |  | 1,282,800.00 |
| 16 | Pilot Scale Protein Purification System (Akta Pilot) |  | 498,000.00 |

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| 17 | Protein Handling and Testing System |  | 1,368,890.00 |
| 18 | Laboratory Scale Cross Flow Protein Purification System |  | 159,000.00 |
| 19 | Nano Particle Zeta Potential (Zeta Sizer) |  | 320,000.00 |
| 20 | Ultracentrifuge (Beckman) |  | 260,000.00 |

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| 21 | Gas Chromatography - Agilent 6890 |  | 136,170.00 |
| 22 | Ultra Centrifuge -Beckman Optima X1 -100K |  | >100K Belian secara tender bersama beberapa alat lain. Tiada rotor |

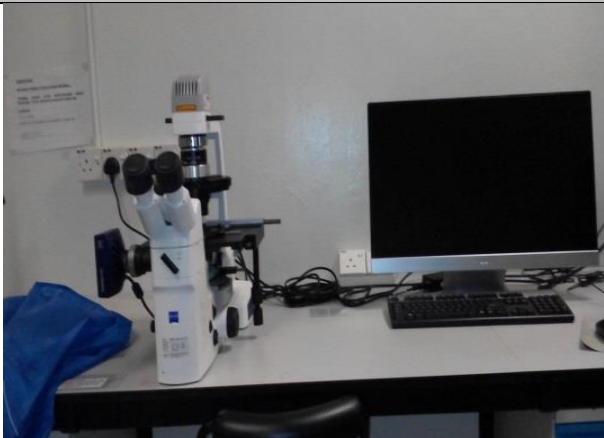

4. LABORATORI HASILAN SEMULAJADI (LHS)

| BIL | NAMA ALAT / PERKHIDMATAN / PRODUK | GAMBAR | HARGA ALAT (RM) |
|-----|---|--|-----------------|
| 1. | Gas Chromatography Mass Spectrometer (Shimadzu) |  | 426,800.00 |




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| 2. | Nuclear Magnetic Resonance Spectrometer (NMR) VnmrS 500MHz |  | 3,757,900.00 |
| 3. | High Performance Liquid Chromatography |  | 151,000.00 |
| 4. | High Performance Liquid Chromatography (2 unit) |  | 299,800.00 |

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| 5. | Centrifugal Partition Chromatography (CCC/CPC) |  | 292,000.00 |
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5. LABORATORI PENYELIDIKAN KANSER UPM - MAKNA (LPKUM)



| BIL | NAMA ALAT / PERKHIDMATAN / PRODUK | GAMBAR | HARGA ALAT (RM) |
|-----|--|--|-----------------|
| 1 | Inverted Fluorescence Microscope with Imaging System |  | 175,000.00 |
| 2 | HPLC System, Additional of Fraction Collector |  | 184,873.28 |

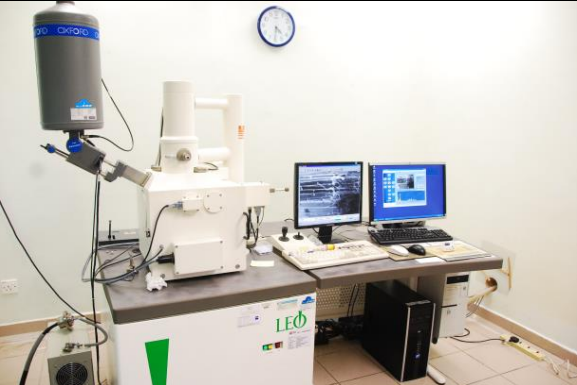


6. UNIT PERUBATAN KOMPARATIF DAN TEKNOLOGI (COMET)




| BIL | NAMA ALAT / PERKHIDMATAN / PRODUK | GAMBAR | HARGA ALAT (RM) |
|-----|---|--|-----------------|
| 1 | Imaging System |  | 193,000.00 |
| 2 | Closed system mice caging exhaust ventilated system |  | 118,000.00 |
| 3 | Closed system rat caging exhaust ventilated system |  | 118,000.00 |

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|---|-----------|--|------------|
| 4 | Autoclave |  | 996,000.00 |
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9. UNIT MIKROSKOPI

| BIL | NAMA ALAT / PERKHIDMATAN / PRODUK | GAMBAR | HARGA ALAT (RM) |
|-----|---|--|-----------------|
| 1 | JEOL JSM 6400 Scaning electron microscope |  | 858,000.00 |
| 2 | JEOL JSM 7600 FESEM |  | 1,950,000.00 |

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|---|--------------------|---|--------------|
| 3 | Leo 1455 VPSEM |  | 890,000.00 |
| 4 | Philips XL30 ESEM |  | 667,000.00 |
| 5 | Hitachi H-7100 TEM |  | 1,279,200.00 |

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| 6 | Leo 912AB EFTEM |  A large, white and grey electron microscope system, identified as a Leo 912AB EFTEM, is shown in a laboratory setting. The machine is complex, with a tall column and various control panels. It is situated on a desk with two computer monitors in the background. | 1,590,000.00 |
| 7 | Zeiss Pascal 5 Exciter Confocal Laser Scanning Microscope |  A Zeiss Pascal 5 Exciter Confocal Laser Scanning Microscope is displayed on a desk. The microscope is white and black, with a large objective lens. It is connected to a computer system with two monitors and a keyboard. | 449,999.25 |
| 8 | Fluorescence Microscope |  A fluorescence microscope is shown on a desk. The microscope is black and white, with a large objective lens. It is connected to a computer system with a monitor and a printer. The desk also has a keyboard and a mouse. | 245,000.00 |

9

Ultramicrotome



278,763.00