

**CENTER FOR ANALYTICAL INSTRUMENTS (managed by NIBB)**



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The Center is responsible for amino acid sequence analysis, amino acid analysis, chemical syntheses of peptides, and next generation sequencing with SOLiD system (ABI) as well as supporting researchers at NIBB and NIPS. The Center's instruments can be used by researchers from outside the institute upon proposal.

**Representative Instruments**

- Protein Sequencers (ABI Procise 494HT, 492cLC)
- Amino Acid Analyzer (Hitachi L8500A)
- Peptide Synthesizer (ABI 433A)
- Plasmid Isolation Systems (Kurabo PI-50α, PI-50, PI-200)
- Automatic Nucleic Acid Isolation System (Kurabo NA-2000)
- Isoelectric Focusing System (Amarsham Biotech IPGphor)
- Genetic Analyzers (ABI PRISM 3130x1, 310)
- Real Time PCR System (ABI 7500)
- Thermal Cyclers (ABI 9700, Perkin Elmer PJ-9600, Biometra TGRADIENT)
- Particle Delivery System (Bio-Rad BiolisticPDS-1000/He)
- Gas Chromatograph (Shimadzu GC-14APF-SC)
- High Performance Liquid Chromatographs (Shimadzu LC-10AD, LC-6AD, Waters 600E, Alliance UV system)
- Integrated Micropurification System (Pharmacia SMART)
- Flow Cytometer (Coulter EPICS XL)
- Biomolecular Interaction Analysis Systems (Pharmacia BIACORE 2000, Affinity Sensors IAsys)
- Laboratory Automation System (Beckman Coulter Biomek 2000)
- ESR Spectrometer (Bruker ER-200D)
- GC/Mass Spectrometer (JEOL DX-300)
- MALDI-TOF-MS (Bruker Daltonics REFLEX III)
- LC/Q-TOF MS (Waters Q-TOF Premier)
- Inductively Coupled Plasma Atomic Emission Spectrometer (Seiko SPS1200A)
- Spectrofluorometers (Hitachi 850, F-4500, Shimadzu RF-5000)
- Spectrophotometers (Hitachi 330, 557, U-2001, Varian Cary5G, Perkin Elmer Lambda-Bio, NanoDrop ND-1000)
- Microplate Luminometer (Berthold MicroLumat LB 96P)
- Microplate Readers (Corona MTP-120, MTP-100F)
- FT-IR Spectrophotometer (Horiba FT-730)
- Bio Imaging Analyzer (Fujifilm BAS 2000)
- Luminescent Image Analyzers (Fujifilm LAS 3000 mini)
- Fluorescence Bio Imaging Analyzer (Takara FMBIO II)

- Environmental Scanning Electron Microscope (PHILIPS XL30 ESEM)
- Confocal Laser Scanning Microscopes (Leica TCS SP2, OLYMPUS FV1000)
- Fluorescence Microscope (KEYENCE BZ-8000)
- Color Laser 3D Profile Microscope (KEYENCE VK-8500)
- High-Resolution Quick Microscope (KEYENCE VH-5000)



Figure 1. Protein sequencers



Figure 2. Confocal Laser Scanning Microscope

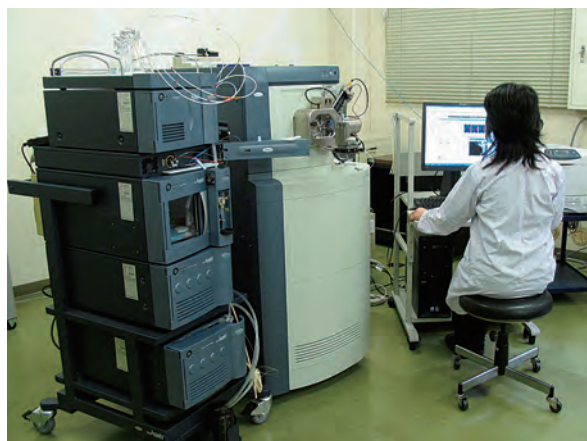


Figure 3. LC/Q-TOF-MS