A High-performance, Hybrid Quadrupole Time-of-flight Mass Spectrometer (LC-MS/MS)

Purpose:

Technology for mass spectrometry is rapidly extending as a tool to analyze chemicals in biological and environmental samples. Hybrid Liquid Chromatography Mass Spectrometer can analyze a structure of unknown chemical and a protein expression to research environmental contamination or the biological effects of chemicals.

Main Specifications:

- 1) A high-performance, hybrid quadrupole time-of-flight mass spectrometer
- High resolution capabilities (0045nm) enable accurate detection of small amounts of chemicals in the presence of co-existing contaminants as a background.
- Enhanced ion optics provide reliable sensitivity with shortened detection time.
- 2) Optional Instrument
 - Nano flow Liquid-Chromatography: The instrument to provide protein samples into a mass spectrometer can be used for protein expression analysis.
 - Capillary Electrophoresis: The instrument to separate chemicals including DNA in small quantities is connectable to a mass spectrometer.

Location and Date of Installation:

Abiko campus, December 2004



A high-performance, hybrid quadrupole time-of-flight mass spectrometer



Nano flow Liquid-Chromatography