

Applied Systems Voyager - DE STR



The Applied Biosystems Voyager - DE STR is a matrix-assisted laser desorption ionization/time of flight (MALDI ToF) mass spectrometer, utilizing a 337 nm nitrogen laser. The instrument has high sensitivity (as low as 2 femtomoles), high mass accuracy (0.05% in the linear mode and 0.01% in the reflectron mode), high molecular weight detection limit (up to 350 kilodaltons), higher tolerance towards certain concentration of buffers, detergents, and salts as compared to other mass spectrometers, and the capability to analyze a mixture of compounds without separation. We recommend the following applications for the MALDI ToF platform:

1. Molecular weight determination of proteins, oligosaccharides, and lipids.
2. Identification and/or monitoring of the post-translational, chemical, and mutational modifications of proteins and nucleotides.
3. Analysis of enzymatically-digested products of proteins for the purpose of protein identification by Mass Fingerprint database searching. Zip-tipping is highly recommended for conducting protein identification through mass fingerprinting.