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| **Instrument** | **Application** | **Approximate cost (USD)** |
| Confocal Raman Spectroscopy | Confocal Raman spectroscopy is an advanced imaging technique that combines the power of Raman spectroscopy and confocal microscopy to reveal the complex molecular composition and structure of materials at the microscopic level. | 200-450k |
| Electron Microscopy | Electron microscopy allows researchers to visualize materials at the atomic level, increasing our understanding of biological structures, materials science, and nanotechnology. | 1.000.000 |
| Mass Spectrometry | Mass spectrometry is a fascinating analytical technique that identifies and quantifies substances by measuring their mass, enabling advances in fields ranging from medicine to environmental science and beyond. | (250-500) k |
| Fast Protein Liquid Chromatography (FPLC) | Fast Protein Liquid Chromatography (FPLC) is an advanced purification technique that skillfully separates proteins with high speed and accuracy, enabling scientists to rapidly isolate valuable biomolecules for research and therapeutic applications. | (70-100) k |
| Fourier Transform Infrared Spectroscopy (FTIR) | Fourier transform infrared spectroscopy (FTIR) is a powerful analytical tool that reveals the unique molecular fingerprint of materials by measuring how they absorb infrared light, allowing scientists to unlock the secrets of everything from drugs to environmental samples with remarkable precision. | (80-100) k |
| Small-Angle X-Ray Scattering (SAXS) | Small-angle X-ray scattering (SAXS) is an advanced technique that provides a window into the nanoworld, allowing scientists to explore the shape, size, and structure of molecules and complex biological materials in solution, revealing insights which are important to understand their performance and behavior. | 700 k |
| Analytical Ultracentrifugation (AUC) | Analytical ultracentrifugation (AUC) is a sophisticated technique that uses high-speed spinning to separate and analyze particles in a solution, providing valuable insight into their size, shape, and interactions, which is used to advance our understanding of biomolecules, and their role is essential in health and disease. | (300-500) k |
| Surface Plasmon Resonance (SPR) | Surface Plasmon Resonance (SPR) is a groundbreaking optical technology that allows scientists to observe and measure molecular interactions in real time, and by detecting tiny changes in light when molecules attach to surfaces, can provide important insights into everything from manufacturing Provide medicine to diagnose the disease. | (50-150) k |
| High-Performance Computing (HPC) | High-performance computing (HPC) systems are used to solve complex problems and perform large-scale simulations in various fields, such as drug discovery, financial forecasting, artificial intelligence, climate modeling, and by processing large amounts of data at high speeds. | 200 k |