

Shimadzu Corporation releases PPSQ-51A/53A SPD-40 model protein sequencers

June 22, 2026 | News

Shimadzu is the only company in the world that manufactures and sells protein sequencers



Japan-based Shimadzu Corporation has released the PPSQ-51A/53A SPD-40 model protein sequencers. These instruments can be used to analyse the amino acid sequences in proteins, such as for quality control of antibody drugs or peptide drugs and has "suitable for routine operations" and "offer accurate and reliable analytical performance."

Once samples are loaded, all steps through amino acid sequence prediction are performed automatically. Shimadzu is the only company in the world that manufactures and sells protein sequencers.

Proteins are molecules with a structure consisting of connected amino acids and with protein functions that differ depending on the type and order of amino acids connected. Protein sequencers perform Edman degradation in the system to sequentially cleave the N-terminus of proteins and analyze the cleaved amino acids by LC, making it easy to determine the amino acid sequence of even unknown proteins.

In recent years, antibody drugs and peptide drugs, which are expected to be highly effective while suppressing side effects because of their high target specificity, have been becoming more widespread. To ensure the quality and safety of such drugs, it is important to analyse their amino acid sequences. Consequently, there has been growing demand for protein sequencers used for that purpose. For quality control applications, users need systems that are suitable for routine operations and that offer accurate and reliable analytical performance.

The newly released PPSQ-51A/53A SPD-40 models are an easy-to-use analytical system equipped with a detector that offers excellent maintainability and data stability. Because all steps after placing samples are performed automatically, including Edman degradation, LC analysis, and amino acid sequence estimation, trustworthy analytical results can be obtained easily and reliably, regardless of the operator skill level.