**FREE
1-MONTH TRIAL**

**Next Generation Sequencing**

# Bruker MBioSEQ™ Ridom Typer

Empower your bacterial genomics analysis for smarter decisions

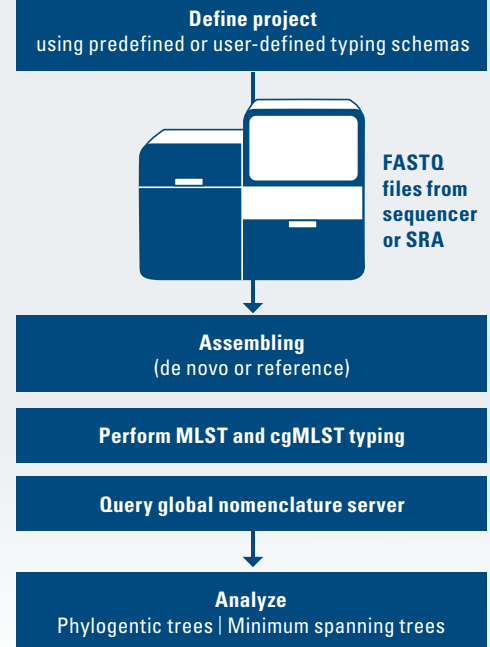Innovation with Integrity

GP

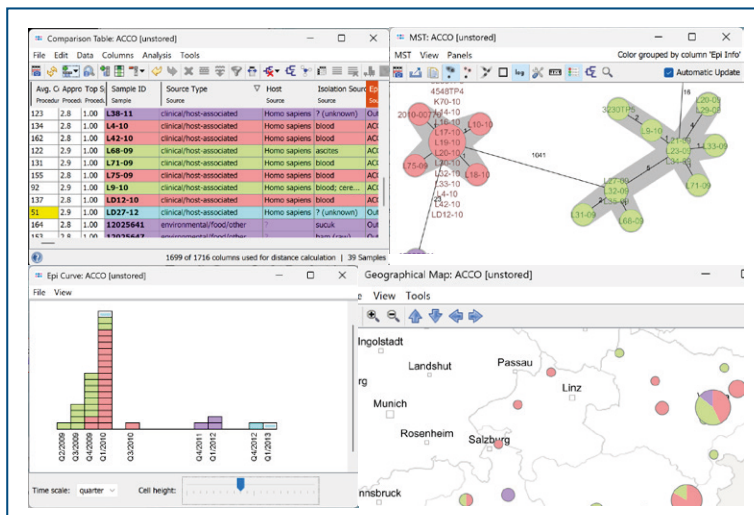# A software solutions empowering epidemiology and hygiene management

## State of the art comprehensive analysis of WGS data – fast and easy

Bruker MBioSEQ Ridom Typer (formerly known as SeqSphere) offers a streamlined, all-in-one solution for bacterial whole genome sequencing (WGS) data and amplicon data analysis. Compatible with most common NGS systems including Illumina, Pacific Biosciences, Oxford Nanopore Technologies (ONT), and Sanger data, it automates every step - from trimming, assembly to core genome MLST (cgMLST) or SNP typing, detection of antimicrobial resistance (AMR) genes, and/or geno-serotyping.

- No bioinformatic skills needed – runs on MS Windows
- Fully automated data processing
- Regularly maintained databases – always up-to-date
- Flexible licensing options that grow with your lab
- **New:** Long read data analysis module for real-time plasmid transmission detection and with proprietary tertiary ONT-cgMLST-Polisher

**Define project**
using predefined or user-defined typing schemas

**FASTQ files from sequencer or SRA**

**Assembling**
(de novo or reference)

**Perform MLST and cgMLST typing**

**Query global nomenclature server**

**Analyze**
Phylogentic trees | Minimum spanning trees



## Smart 4-dimensional surveillance for big NGS data

Bruker MBioSEQ Ridom Typer simplifies complex NGS genomic data analysis with intuitive 4D visualization - by person, place, time, and type. Designed for ease of use, it runs on a Windows interface, making it accessible to non-specialists. All views are interconnected, exportable
in publication-ready formats, and backed by a robust SQL-database. Real-time alerts support clonal and plasmid transmission studies comparing new sequence entries against stored data.

User-friendly visualization of results
with Bruker MBioSEQ Ridom Typer.

## Secure confidential data sharing with community power

- Handle and store your results in an integrated database
- Various configurable user roles, user groups, and access controls enabling audit trail for accredited laboratories
- Download and share certified typing schemes easily
- SSL Encryption of all data in transmission
- EBI European Nucleotide Archive (ENA)-compliant metadata fields for seamless data submission in an anonymous way
- Consortium Server enables secure data sharing and automatic clonal match alerts across several Bruker MBioSEQ Ridom Typer users and installations

# Bruker epidemiology solution expands with MBioSEQ™ Ridom Typer

Bacterial typing generates isolate-specific genotypic or phenotypic characteristics that help trace the sources and transmission routes of bacterial infections. Typing also plays a key role in identifying emerging pathogenic strains or clones within a species.

Today, microbiologists can experience the genomic revolution that benchtop next generation sequencing (NGS) provides. With fast and cost-effective microbial WGS and Bruker's automated user-friendly analysis software MBioSEQ™ Ridom Typer, microbiologists can use genome-wide gene-by-gene allele calling of hundreds to thousands of genes (cgMLST) for genotyping.

## From identification to in-depth genotyping - all in one workflow

The market-leading MALDI Biotyper® identifies microorganisms to the species level with unequaled speed and accuracy. Following identification, the IR Biotyper® enables real-time strain typing, and fast outbreak detection thanks to the new IR Tracker™ software features. Bruker's MALDI Biotyper and IR Biotyper can be combined into a single seamless, high-throughput workflow for rapid microbial identification and typing.
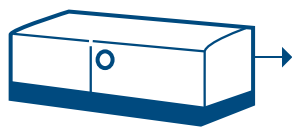
To deepen your analysis, MALDI Biotyper identifications or IR Biotyper-identified outbreak suspects can be reflexed to WGS for the detection of resistance genes, specific mutations, and confirmation of strain identity. Here, Bruker's automated and user-friendly MBioSEQ™ Ridom Typer software, takes your epidemiological approaches and microbial monitoring to a new level, enabling quick and smart decisions.

Bruker MBioSEQ Ridom Typer software running under Windows and Linux integrates easily into existing lab routines.
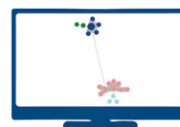
**From identification to epidemiological insight: A seamless microbial journey, now within everyone's reach**

MALDI Biotyper®  →  IR Biotyper®  →  Data Analysis with MBioSEQ™ Ridom Typer

| Microbial Identification | Strain Typing | NGS Typing and AMR Profiling |

## Computer Specifications

For detailed information on system requirements please visit our website

# Flexible licensing options that grow with your lab

## Bruker MBioSEQ™ Ridom Typer

| License period<br>The license will expire after the defined period and the software runs with read-only access unless you prolong the contract. Read-only access still allows to view and export existing data. | Named users<br>Named users define the maximum number of user accounts that can be set-up on one MBioSEQ™ server. Each named user account allows to login interactively once at the same time. | Part number |
|---|---|---|
| 1 year | **2 named users**<br>maximum number of concurrent pipelines in total 5 | **1921470** Accademic, govt. |
| | | **1921471** Commercial |
| | **5 named users**<br>maximum number of concurrent pipelines in total 12 | **1921472** Accademic, govt. |
| | | **1921473** Commercial |
| | **30 named users**<br>maximum number of concurrent pipelines in total 75 | **1921474** Accademic, govt. |
| | | **1921475** Commercial |
| 3 years | **2 named users**<br>maximum number of concurrent pipelines in total 5 | **1921476** Accademic, govt. |
| | | **1921477** Commercial |
| | **5 named users**<br>maximum number of concurrent pipelines in total 12 | **1921478** Accademic, govt. |
| | | **1921479** Commercial |
| | **30 named users**<br>maximum number of concurrent pipelines in total 75 | **1921480** Accademic, govt. |
| | | **1921481** Commercial |
| 5 years | **2 named users**<br>maximum number of concurrent pipelines in total 5 | **1921482** Accademic, govt. |
| | | **1921483** Commercial |
| | **5 named users**<br>maximum number of concurrent pipelines in total 12 | **1921484** Accademic, govt. |
| | | **1921485** Commercial |
| | **30 named users**<br>maximum number of concurrent pipelines in total 75 | **1921486** Accademic, govt. |
| | | **1921487** Commercial |

### NEW: Long Read Module that includes the ONT data assembly and long read data plasmid transmission analysis sub-modules.

Extra charged to licence for Bruker MBioSEQ Ridom Typer.

For ordering, please contact your local Bruker representative.

Not for use in clinical diagnostic procedures.
Please contact your local representative for availability in your country.

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**For detailed product information and training materials please see**
www.ridom.de