

16S rDNA BACTERIAL SEQUENCE IDENTIFICATION SERVICE

NCIMB Ltd

THE SERVICE

NCIMB provides a number of options for bacterial identification using the MicroSeq™ 16S rDNA kit and accompanying software and bacterial sequence database.

500 bp or full length sequence identification - Unknown isolates are identified using sequence data from either the first 500bp or the full 16S rDNA gene.

- **Standard identification** – DNA is extracted from the isolate, PCR amplified and sequencing reactions prepared using the MicroSeq™ 16S rDNA kit. The sequence obtained for each isolate is identified using the MicroSeq™ database. A report containing the top 10 hits and phylogenetic tree are provided.
- **Comprehensive package**- In addition to the standard identification service, electronic copies of the electropherograms and text files of the sequence are provided.

In the event that the MicroSeq™ database does not provide a genus level identification then public databases (EMBL & Ribosomal Database Project [RDP]) are searched for the closest match. Use of an alternative database is indicated in the report.

PCR optimisation - on rare occasions it may be necessary to repeat and optimise the PCR stage of the process. A small charge is made for this however, if this is unsuccessful there are no overall charges.

ADDITIONAL SERVICES

- *Further data analysis* - If MicroSeq™ produces a genus level identification but more detailed information is required then further database analyses are available (EMBL, RDP).
- *Confirmatory phenotypic* – Biochemical or other testing may be available by prior arrangement to validate sequencing results or differentiate between closely related strains.

If requested NCIMB will fax or telephone the conclusions in advance of the written report, at no extra charge.

NCIMB cannot guarantee the level of identification achieved. Fees are payable for performing the sequence analysis regardless of the level of identification achieved.

All work on and information about isolates submitted for identification are treated in strict confidence, and, unless the client instructs otherwise, all cultures are destroyed on completion of the work.

WHAT YOU NEED TO DO

1. Pure cultures should be supplied inoculated onto solid media and incubated to produce sufficient growth (A charge may be made for the analysis of mixed cultures) Detailed advice on the packaging of bacterial cultures is available on request.
2. Please note that cultures will not automatically be maintained in a viable state.
3. NCIMB does not accept active cultures of dangerous human pathogens or organisms isolated from clinical or diseased plant materials for identification.
4. If biochemical testing is required after sequencing analysis then sufficient cultural details (media/temperature) should be provided to enable NCIMB to grow and maintain the isolate. It is helpful to know the general source of the isolate, to assist interpretation of data.
5. Please complete the Sequencing request form including an official purchase order number and contact name with each identification.

CONTACT DETAILS

If you require further information on our services or wish to discuss your requirements in more detail please contact us on 01224 711147 or E-mail sequencing@ncimb.co.uk