



INTERPRETATION OF RESULTS USING MICROGEN® IDENTIFICATION SYSTEMS SOFTWARE

Once an Octal Code has been entered into the appropriate identification system in the Microgen Identification System Software, 5 suggested identification choices will be provided, these choices are provided in decreasing order of probability.

Under the heading "Identification Comments", a comment on the accuracy of the first identification choice, the most probable identification choice, will be displayed. This comment is based on an analysis of the:

1. **Likelihood:** a measurement of how similar the reaction pattern being analysed is to a typical strain of each of the five choices offered by the program.
2. **Percentage Probability:** the measurement of the degree of separation of the first choice to each of the five identification choices offered by the program.

Therefore, the program examines how typical the Octal Code is for the first choice offered, when compared to a typical strain of that choice, and then determines how well separated this choice is from the other 4, less probable choices.

The threshold values for the identification comments are:

Excellent Identification: Likelihood >75% and Percentage Probability >95%
(The strain is very typical and is well separated from the other suggested identification choices)

Very Good Identification: Likelihood >50% and Percentage Probability >80%
(The strain is either typical or very typical and is well separated from other suggested identification choices)

Good Identification: Likelihood >50% and Percentage Probability >60%
(The strain is not typical, but it is moderately well separated from other suggested identification choices). In this situation it is expected that one test may be against this choice.

Acceptable Identification: Likelihood >10% and Percentage Probability >60%
(The strain is not typical but it is moderately well separated from other suggested identification choices). In this situation it is expected that more than one test may be against this choice.

Inconclusive Identification: Likelihood >1% and Percentage Probability >60%
(The strain is not typical but it is moderately well separated from other suggested identification choices). In this situation it is expected that multiple tests may be against this choice.

Doubtful Identification: Likelihood >0.01% and Percentage Probability >60%
(The strain is not typical but it is moderately separated from other suggested identification choices). In this situation it is expected that multiple tests may be against this choice.

Unacceptable Identification: Likelihood <0.01% and Percentage Probability <60%
(The strain is not typical and it is poorly separated from other suggested identification choices). In this situation it is expected that multiple tests may be against this choice.

An Identification to the Taxon Only may also be given when:

1. More than 3 choices belong to the same taxa, AND
2. The Percentage Probability of the first choice offered is <80%

In addition to the identification comments described above, each identification is accompanied by:

1. Detailed identification description

These comments further explain the criteria upon which the identification comments described above are based e.g. Excellent Identification - The strain is very typical and is well separated from the other suggested identification choices. In the case of lower accuracy identifications, (Acceptable, Doubtful, Inconclusive or Unacceptable) guidance on further possible actions is also provided e.g. performance of additional tests.

2. Tests Against

Details of any tests that are determined by comparing the results obtained with the unknown organism to the typical or expected results for each of the species under consideration and those reactions that are anomalous are displayed.

3. Additional Tests

The Microgen[®] Identification System Software also recommends a range of supplementary tests or additional tests that may be used to further differentiate the species selected as the most likely identification choices.