It is often necessary to preserve microorganisms for future study. This may be for reasons of research, clinical investigations, epidemiology, education, or commercial use. Effective preservation requires the organisms to remain viable, free of contamination, and without any alteration of genotype or phenotype. Ideally, the organism should be easy to retrieve and restore to its original condition.

Medical Wire’s Viabank™ is a convenient, easy-to-use cryoprotection system for the storage of microorganisms. The culture to be preserved is added to the cryopreservative solution in a vial of 25 (approximately) coloured ceramic beads. After mixing, the excess fluid is removed, and the vial is stored in a freezer. When the organism is required, individual beads are removed from the vial and used to establish a fresh culture.

Viabank™ is supplied in convenient stackable freezer grade boxes which can be used for storage. Each box contains 80 Viabank™ vials with either 4 different coloured caps in each box, or a choice of one colour from the four options. The boxes are divided into individual compartments for the vials, and the lid has a colour coded grid to assist you in keeping track of your valuable isolates. Each vial has a frosted area for writing brief details of the contents.

Microorganisms for storage can be taken from broth cultures, or colonies on a plate. The inoculums is added to the vial, allowed to mix with the cryopreservative, and to equilibrate for a short time at room temperature. This allows the organisms to settle onto the ceramic bead surface. Finally the excess liquid is decanted or aspirated, and the vial can be closed and transferred to the freezer.

For real long term storage, temperatures below -130°C are recommended, but for most non-fastidious organisms, -80°C will be satisfactory for up to 5 years. Storage at -20°C is not really recommended because the temperature is not low enough to prevent ice crystal formation. If it has to be done, some organisms can survive for up to 2 years, and we have successfully stored some in Viabank™ for over 10 years. In this case it is essential to regularly check the stored organisms for viability, and of course with Viabank™ this can be easily done by simply removing and testing a single bead.

Viabank is suitable for most bacteria, yeasts and moulds, including anaerobes, and the major food and clinical pathogens.

References

Full details available at [www.mwe.co.uk](http://www.mwe.co.uk)

<table>
<thead>
<tr>
<th>Product Reference</th>
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<td>VIABANK (Red)</td>
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<tr>
<td>MWVIB</td>
<td>VIABANK (Blue)</td>
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</table>

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