

The preparation of genomic DNA from bacteria

The DNA purification method:

Genomic DNA (gDNA) is prepared from fresh cultures or from freeze-dried stocks of bacteria.

The FastDNA[®] Kit (for isolation of genomic DNA from plants, animals, bacteria, yeast, algae, and fungi) is used, employing the protocols of the manufacturer (BIO 101[®] Systems); distributor: Q-BioGene, Carlsbad, Ca., USA; Cat. # 6540-400.

Description of the gDNA purification protocol can be found at:

<http://www.qbiogene.com/fastprep/fastdna.shtml>

We aliquot the gDNA extracts into ampoules and lyophilise the material. A quality control is performed of the freeze-dried gDNA by resuspending with buffer and measuring spectrophotometrically, as well as by PCR-amplification.

The extracted gDNA is thus determined to be of “PCR-quality”.

A single ampoule of 3 - 5 µg gDNA is usually provided per order.

gDNA prepared directly from freeze-dried material will usually be of less quantity and quality than gDNA prepared from fresh cultures. However, orders can be processed from fastidious strains much quicker.

Upon receipt, the freeze-dried material should be resuspended with buffer (e.g., TE-buffer) or water at the concentration needed.

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