



BRITISH PHARMACOPOEIA NUCLEIC ACID REFERENCE MATERIAL INFORMATION LEAFLET

trnH-psbA

CATALOGUE NUMBER 1185

CURRENT BATCH: 3837

HL: 0002

Declared Content

No absolute content figure is given as the standard is not used for assay purposes. Each tube contains DNA of 1 ng approximate quantity, which when reconstituted according to the 'Instructions for Use' below will result in a solution of 0.05 ng/ μ L approximate concentration.

Instructions for Use

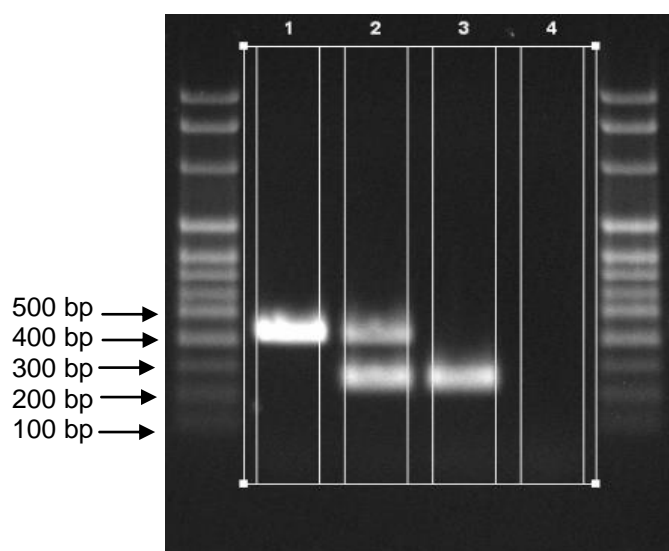
This British Pharmacopoeia Nucleic Acid Reference Material (BPNARM) is to be used as directed in the British Pharmacopoeia and is not intended for any other purpose.

1. Reconstitute the *trnH-psbA* BPNARM by adding 20 μ L of molecular biology grade water, or TE buffer, vortexing briefly and leaving to stand for 15 minutes.
2. Prepare the plant materials to be used for DNA extraction by milling to a fine powder.
3. From one batch of plant material, prepare two samples of 0.02 g dried weight material in 1.5 mL plastic tubes. Label one of these tubes 'NARM'.
4. Add 15 μ L of *trnH-psbA* BPNARM to the plant sample in the 'NARM' tube to act as a positive control for DNA extraction.
5. Continue with the DNA extraction process for all samples as described in BP Appendix XI V.
6. Conduct any additional clean-up procedures as described in Appendix XI V.
7. Conduct PCR using the *trnH-psbA* primers and protocol as stated in the BP Appendix XI V method. Add an extra PCR using 1 μ L of *trnH-psbA* BPNARM in place of a DNA sample as a positive control for the PCR.
8. Analyse the PCR results by Agarose gel electrophoresis, with a DNA ladder or molecular weight marker.
9. For a successful result, the PCR of DNA extracted from the 'NARM' sample will produce a band at 245 bp. This may be in addition to the band produced from the plant materials' DNA.



Reference Electrophoresis Results

Lane 1	Amplification product from <i>Ocimum tenuiflorum</i> (Holy Basil) plant material.
Lane 2	Amplification product from the 'NARM' sample described above, showing both the plant DNA band and the BPNARM band. This is the DNA extraction control.
Lane 3	Amplification product of the BPNARM alone, the PCR positive control.
Lane 4	Negative control with no amplification product visible.



Criteria for acceptance:

Lane 1	Visible band from the plant DNA.
Lane 2	245 bp band from the BPNARM. The band from the plant DNA may or may not be present.
Lane 3	245 bp band from the BPNARM.
Lane 4	No band.