



BIOSCIENCES[®] G-Biosciences, St Louis, MO, USA **+** 1-800-628-7730 **+** 1-314-991-6034 + <u>technical@GBiosciences.com</u>

*Toothpick*TM-PCR

INTRODUCTION

*Toothpick*TM-PCR allows for the rapid analysis of plasmid DNA by the polymerase chain reaction (PCR) from a bacterial colony itself. There is no requirement for growing bacteria, performing "minipreps" or purifying the plasmid DNA. Simply pick a bacterial colony and screen with *Toothpick*TM-PCR to see if you have the right construct. This kit has enough reagents for the screening of 300 colonies.

The 6X Glow BromoBlue^{M} Dye is Ficoll based and there is no need to add ethidium bromide to the running buffer as the dye contains ethidium bromide. Glow BromoBlue^{M} Dye provides intense DNA bands with little background or band distortion and can be used with any type of agarose or acrylamide gels.

ITEM(S) SUPPLIED	Cat#: 786-410
Plasmid Screening <i>Toothpick</i> [™]	4.5ml
6X Glow BromoBlue [™] Dye	1.5ml

STORAGE CONDITIONS

The kit is shipped at ambient temp. Store it at 4°C, upon arrival and is table for one year, if stored and used properly.

PROTOCOL

1. Pick a freshly plated bacterial colony (1-2 mm in diameter) with a sterile toothpick or pipette tip and suspend transfer to the bottom of a 0.6ml tube or microtiter plate well. Remember to clearly label the colonies picked for easy identification of positive colonies later.

2. Add 15 μ l of the Plasmid Screening *Toothpick*TM solution to the tube or well and vigorously vortex to resuspend the bacteria. Incubate at room temperature for 1-2 minutes and mix again.

3. Heat the sample at 100°C in a boiling water bath for 5 minutes.

4. Vortex and chill on ice for 2 minutes.

5. Transfer 1µl sample to a 50µl PCR reaction mix (Primers, deoxynucleotides, polymerase and polymerase buffer).

6. Perform the PCR reaction as normal.

7. After the PCR reaction is complete, transfer 10 μ l PCR reaction mix to a fresh tube and add 2 μ l of the 6X Glow BromoBlueTM Dye to the sample. Mix and load into the wells of an agarose gel. No additional ethidium bromide is required.

8. Once electrophoresis is complete visualize PCR products under UV.

RELATED PRODUCTS

1. <u>GETTM Plasmid Maxiprep (Cat.# 786-363 to 786-364)</u>:

G-Biosciences has developed <u>pinkRESIN</u>^M, a superior binding matrix for purification of plasmid DNA. It has an enhanced binding affinity for plasmids and resuspend with ease, thus eliminates the loss of plasmid.

<u>NOTE</u>: For other related products, visit our web site at <u>www.GBiosciences.com</u> or contact us.

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think proteins! think G-Biosciences!