CERTIFICATE OF ANALYSIS

BIOMAN SCIENTIFIC CO.,LTD.TEL:02-8226-6598 FAX:02-8226-6586

BioTAQ DNA Polymerase

CATALOGUE NO: VB01,(500Units/100 μl)Including10x reaction buffer with15mM MgCl2

CONCENTRATION: 5u/ μl

UNIT DEFINITION: One unit is defined as the amount Of nzyme that incorporates10 nmoles of dNTPs into acid insoluble form in 30 minutes at 74℃

STORAGE BUFFER: 20mM Tris-HCl (pH8.0 at 25℃); 1.0%Triton X-100; 0.1mM EDTA 1mM DTT; and 50%(v/v) glycerol.

STORAGE CONDITION: Stable at -20℃ for least one year when stored in a constant-temperature freezer.

ASSOCIATED ACTIVITIES: Endonuclease activity and exonuclease activity were not detectable After two hour incubation of 1 μg lambda DNA and 0.22 μg of EcoRI-digested lambda DNA at 72℃ in presence of 5 units of BioTaq DNA Polymerase.

PROTOCOL: The basic protocol serves as a general starting point for PCR , optimal reaction conditions, such as temperature, times, primers, and BioTaq concentration need to be evaluated by the customer.

1.Add the following components to a sterile PCR tube on ice:

Components	Volume	Final concentration
10x PCR buffer/w Mgcl2	5ul	1X
10mM dNTP mixture	1ul	0.2mM each
Primer mix (10u M each)	2.5ul	0.5uM each
Template DNA	1~10ul	
BioTaq DNA polymerase	0.5ul	2.5units
Autoclaved distilled water to	50ul	

2.Mix contents of tube and overlay with 50ul of mineral oil

3.Incubate tube in a thermocycler at 94℃ for 3 minutes to completely denature the template.

4.PCR amplification cycles(30-35cycles)

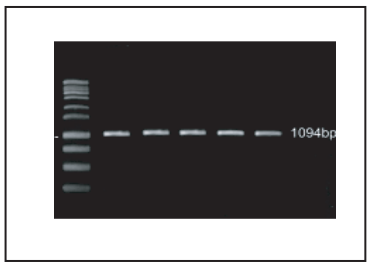
Denature	94℃ for	45s
Anneal	55℃ for	30s
Extend	72℃ for	1min30s

5.Incubate for additional 10min at 72℃ and maintain 4℃

Note: If DNA template to be used for PCR is from reverse transcript RNA, to avoid carried-over salt from RT reaction that may inhibit BioTaq DNA polymerase, no more then 1/10 (for example less then 2ul of 20ul total RT reaction) of the total RT volume should used in PCR reaction.

QUALITY CONTROL:

Sample : Human Genomic DNA



Components	Volume
10x PCR buffer/w $Mgcl_2$	5ul
2.5mM dNTP mixture	2ul
primer mix (10uM each)	2.5ul
Template DNA	2ul
BioTaq DNA Polymerase	0.15ul
Autoclaved distilled water to	50ul

1.Incubate tube in a thermocycler at 94℃ for 3 minutes

2.PCR amplification cycles(35cycles)

Denature	94℃for	40s
Anneal	52℃ for	30s
Extend	72℃ for	1min

3.Incubate for additional 10min at 72℃ and maintain 4℃

CERTIFICATE OF ANALYSIS

BIOMAN SCIENTIFIC CO.,LTD.TEL:02-8226-6598 FAX:02-8226-6586

BioTAQ DNA Polymerase

CATALOGUE NO: VB01,(500Units/100 μl)Including10x reaction buffer with15mM MgCl2

CONCENTRATION: 5u/ μl

UNIT DEFINITION: One unit is defined as the amount Of nzyme that incorporates10 nmoles of dNTPs into acid insoluble form in 30 minutes at 74℃

STORAGE BUFFER: 20mM Tris-HCl (pH8.0 at 25℃); 1.0%Triton X-100; 0.1mM EDTA 1mM DTT; and 50%(v/v) glycerol.

STORAGE CONDITION: Stable at -20℃ for least one year when stored in a constant-temperature freezer.

ASSOCIATED ACTIVITIES: Endonuclease activity and exonuclease activity were not detectable After two hour incubation of 1 μg lambda DNA and 0.22 μg of EcoRI-digested lambda DNA at 72℃ in presence of 5 units of BioTaq DNA Polymerase.

PROTOCOL: The basic protocol serves as a general starting point for PCR , optimal reaction conditions, such as temperature, times, primers, and BioTaq concentration need to be evaluated by the customer.

1.Add the following components to a sterile PCR tube on ice:

Components	Volume	Final concentration
10x PCR buffer/w Mgcl2	5ul	1X
10mM dNTP mixture	1ul	0.2mM each
Primer mix (10u M each)	2.5ul	0.5uM each
Template DNA	1~10ul	
BioTaq DNA polymerase	0.5ul	2.5units
Autoclaved distilled water to	50ul	

2.Mix contents of tube and overlay with 50ul of mineral oil

3.Incubate tube in a thermocycler at 94℃ for 3 minutes to completely denature the template.

4.PCR amplification cycles(30-35cycles)

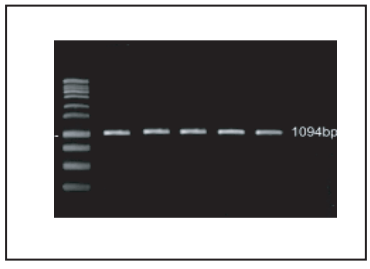
Denature	94℃ for	45s
Anneal	55℃ for	30s
Extend	72℃ for	1min30s

5.Incubate for additional 10min at 72℃ and maintain 4℃

Note: If DNA template to be used for PCR is from reverse transcript RNA, to avoid carried-over salt from RT reaction that may inhibit BioTaq DNA polymerase, no more then 1/10 (for example less then 2ul of 20ul total RT reaction) of the total RT volume should used in PCR reaction.

QUALITY CONTROL:

Sample : Human Genomic DNA



Components	Volume
10x PCR buffer/w $Mgcl_2$	5ul
2.5mM dNTP mixture	2ul
primer mix (10uM each)	2.5ul
Template DNA	2ul
BioTaq DNA Polymerase	0.15ul
Autoclaved distilled water to	50ul

1.Incubate tube in a thermocycler at 94℃ for 3 minutes

2.PCR amplification cycles(35cycles)

Denature	94℃for	40s
Anneal	52℃ for	30s
Extend	72℃ for	1min

3.Incubate for additional 10min at 72℃ and maintain 4℃