MagGenome
TECHNOLOGIES PVT. LTD.

PRODUCT CATALOGUE

MOLECULAR BIOLOGY GRADE REAGENTS & CHEMICALS

for Research and Development purposes only

www.maggenome.com

Products consolidated

Product	Catalogue Number	Quantity/ Pack Size
DNA Polymerases		
Taq DNA polymerase	PE1601	250U
Taq DNA polymerase	PE1602	500U
Taq DNA polymerase	PE1603	1000U
Pfu DNA polymerase	PE1604	250U
Pfu DNA polymerase	PE1605	500U
Pfu DNA polymerase	PE1606	1000U
PCR Master Mixes		
2X Plus Mix	MX2501	1 ml
2X TaqP Mix	MX2502	1 ml
2X PfuP Mix	MX2503	1 ml
Nucleotides		
dNTP mix of 10mM each (dATP, dTTP, dGTP, dCTP)	NT2656	1 ml
dNTP mix of 2.5mM each (dATP, dTTP, dGTP, dCTP)	NT2657	1 ml
dNTP set of 100mM each (dATP, dTTP, dGTP, dCTP)	NT2658	250µl *4
DNA Ladders		
100 bp ladder- 100 ng/µl	LD2681	50 µg
1 kb ladder- 104 ng/µl	LD2682	50 µg
λDNA/Hind III Digest	LD2683	50 µg
50 bp ladder- 108 ng/µl	LD2684	50 µg
20 bp ladder- 108 ng/µl	LD2685	50 µg
DNA Dyes		
6X Gel Loading buffer-Blue	BS500	1 ml
6X Gel Loading buffer-Blue	BS500-05	5 ml
6X Gel Loading buffer two colour- (Xylene/Orange)	BS501	1 ml
6X Gel Loading buffer two colour- (Xylene/Orange)	BS501-05	5 ml
6X Gel Loading buffer two colour- (Xylene/Blue)	BS502	1 ml
6X Gel Loading buffer two colour- (Xylene/Blue)	BS502-05	5 ml
6X Gel Loading buffer three colour- (Xylene/Blue/Orange)	BS503	1 ml
6X Gel Loading buffer three colour- (Xylene/Blue/Orange)	BS503-05	5 ml
6X Gel Loading buffer two colour- (Xylene/Blue, SDS)	BS513	1 ml
6X Gel Loading buffer two colour- (Xylene/Blue, SDS)	BS513-05	5 ml

Products consolidated

Product	Catalogue Number	Quantity/ Pack Size
Buffers & Solutions		
50X TAE Buffer concentrate	BS504-100	100 ml
50X TAE Buffer concentrate	BS504-200	200 ml
50X TAE Buffer concentrate	BS504-500	500 ml
10X MOPS Buffer Concentrate	BS505-200	200 ml
10X MOPS Buffer Concentrate	BS505-500	500 ml
10X TBE Buffer Concentrate	BS506-200	200 ml
10X TBE Buffer Concentrate	BS506-500	500 ml
10X MES Buffer Concentrate	BS507-200	200 ml
10X MES Buffer Concentrate	BS507-500	500 ml
10X PBS Buffer Concentrate	BS508-100	100 ml
10X PBS Buffer Concentrate	BS508-500	500 ml
25X PBS Buffer Concentrate	BS509-100	100 ml
25X PBS Buffer Concentrate	BS509-500	500 ml
25X PBS Buffer Concentrate with Tween 20	BS510-100	100 ml
25X PBS Buffer Concentrate with Tween 20	BS510-500	500 ml
10% SDS Solution	BS511-50	50 ml
10% SDS Solution	BS511-100	100 ml
0.5 M EDTA Solution, pH 8.0	BS512-100	100 ml
0.5 M EDTA Solution, pH 8.0	BS512-500	500 ml
Enzymes		
RNAse A- 10mg/ml	ZY2001	1 ml
RNAse A- 20mg/ml	ZY2002	1 ml
Chemicals		
Agarose	CB001	100 gm
Agarose	CB002	500 gm

Taq DNA Polymerase

Taq DNA Polymerase is a thermostable recombinant DNA polymerase derived from thermophilic bacterium *Thermus aquaticus*. Taq DNA Polymerase can amplify DNA target up to 5 kb (simple template). The elongation velocity is 2kb/min (70~75°C). It has 5' to 3' polymerase activity but lacks 3' to 5' exonuclease activity that results in a 3'-dA overhangs PCR product. The half-life of the enzyme is >40 minutes at 95°C.

Contents

Taq DNA Polymerase
10X PCR Buffer (Mg^{2+} Plus)
6X Loading Dye

Ordering Information

Cat#	Units	Strength	Volume
PE1601	250U	5U/µl	50 µl
PE1602	500U	5U/µl	100 µl
PE1603	1000U	5U/µl	200 µl

Pfu DNA Polymerase

Pfu DNA Polymerase derived from the hyperthermophilic archae *Pyrococcus furiosus*, has superior thermostability and proofreading properties compared to other thermostable polymerases. It can amplify DNA target up to 2 kb (simple template). The elongation velocity is 1kb/min (70-75°C). Pfu DNA polymerase possesses 3' to 5' exonuclease proofreading activity that enables the polymerase to correct nucleotide-misincorporation errors. PCR reactions results in blunt-ended PCR products, which are ideal for cloning into blunt-ended vectors.

Contents

Pfu DNA Polymerase
10X Pfu Buffer (Mg^{2+} Plus)
6X Loading Dye

Ordering Information

Cat#	Units	Strength	Volume
PE1604	250U	5U/µl	50 µl
PE1605	500U	5U/µl	100 µl
PE1606	1000U	5U/µl	200 µl

2X Plus Mix

2× Plus Mix is a premixed, ready-to-use solution containing Taq Plus DNA Polymerases (Taq and Pfu), dNTPs, Mg^{2+} and Reaction buffer at optimal concentrations for efficient amplification of DNA templates by PCR; only need to add primers and template DNA. This premixed formulation saves time and reduces contamination due to the fewer pipetting steps required for PCR set-up. The elongation rate is 3kb/min. It can amplify DNA target up to 20 kb (simple template). PCR products amplified by Taq Plus are mixture of blunt-ends and 3′ dA-overhangs.

Contents

2X Plus Mix
Nuclease Free Water

2X TaqP Mix

2× TaqP Mix is a premixed, ready-to-use solution containing Taq DNA Polymerase, dNTPs, Mg^{2+} and Reaction buffer at optimal concentrations for efficient amplification of DNA templates by PCR. To prepare the final PCR, only need to add primers and template DNA. The elongation velocity is 2kb/min (70~75°C). It has 5′ to 3′ polymerase activity but lacks 3′ to 5′ exonuclease activity that results in a 3′-dA overhangs PCR product.

Contents

2X TaqP Mix
Nuclease Free Water

2X PfuP Mix

2× PfuP Mix is a premixed, ready-to-use solution containing Pfu DNA Polymerase, dNTPs, Mg^{2+} and Reaction buffer at optimal concentrations for efficient amplification of DNA templates by PCR. To prepare the final PCR, only need to add primers and template DNA. The elongation velocity is 2kb/min (70~75°C). It has 5′ to 3′ polymerase activity and 3′ to 5′ exonuclease activity and results in blunt ended products. The elongation velocity is 1kb/min(70~75°C).

Contents

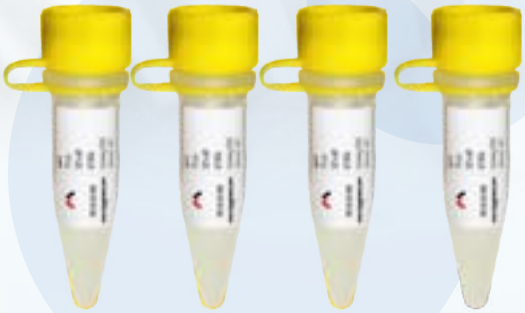
2X PfuP Mix
Nuclease Free Water

dNTP Mix

dNTP Mix is an aqueous solution at pH 7.0 containing dATP, dTTP, dGTP and dCTP. dNTP mix is a ready to use solution designed to save time and to provide higher reproducibility in PCR and other applications. The mix offers the possibility to reduce the number of pipetting steps and the risk of reaction set up errors.

Ordering Information

Cat#	Product	Specifications
NT2656	dNTP mix of 10 mM each (dATP, dTTP, dGTP, dCTP)	1 ml
NT2657	dNTP mix of 2.5 mM each (dATP, dTTP, dGTP, dCTP)	1 ml
NT2658	dNTP set of 100 mM each (dATP, dTTP, dGTP, dCTP)	250µl *4



dNTP Set

The set consists of 100 mM aqueous solutions of dATP, dTTP, dCTP and dGTP each supplied in a separate vial. Since the nucleotides are provided separately, the dNTP Set offers maximum flexibility in preparation of reaction mixes for different applications.

DNA ladders

100 bp Ladder

Ideal for determining the size of dsDNA from 100 bp to 1500 bp; consists of 11 linear double stranded fragments.

1 kb Ladder

Ideal for determining the size of dsDNA from 500 kb to 10000 bp; consists of 10 linear double stranded fragments.

λ DNA/ Hind III

Yields 8 fragments suitable for use as molecular weight standards for agarose gel electrophoresis, ranges 23 kb to 125 kb

50 bp Ladder

Ideal for determining the size of dsDNA from 50 bp to 1000 bp; consists of 13 linear double stranded fragments.

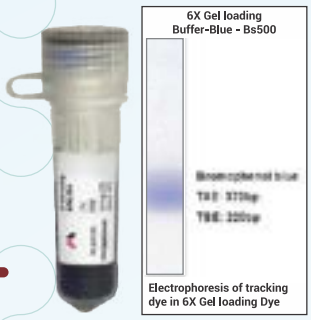
20 bp Ladder

Ideal for determining the size of dsDNA from 60 bp to 300 bp; consists of 13 linear double stranded fragments.

Ordering Information

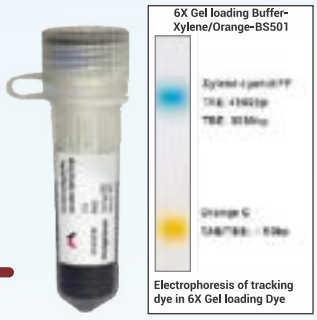
Cat#	Product	Specifications
LD2681	100 bp ladder	50 µg at 100 ng/µl
LD2682	1 kb ladder	50 µg at 104 ng/µl
LD2683	λ DNA/ Hind III Digest	50 µg
LD2684	50 bp ladder	50 µg at 128 ng/µl
LD2685	20 bp ladder	50 µg at 128 ng/µl

Loading buffers



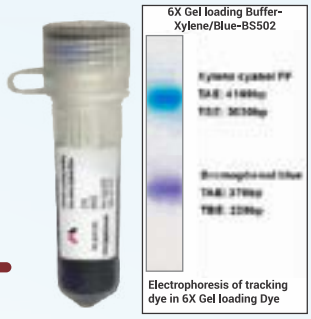
6X Gel Loading Buffer-Blue

Gel Loading buffer-Blue (6×) is a pre-mixed loading buffer with one tracking dye- bromophenol blue, for agarose and non-denaturing polyacrylamide gel electrophoresis. EDTA is included to chelate magnesium (up to 10 mM) in enzymatic reactions, thereby stopping the reaction.



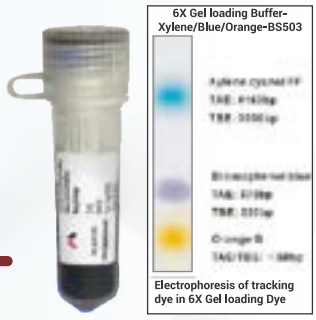
6X Gel Loading Buffer two colour-Xylene/Orange

Gel Loading buffer two colour xylene/blue, sds (6×) is a pre-mixed loading buffer with two tracking dye-bromophenol blue, for agarose and non-denaturing polyacrylamide gel electrophoresis. EDTA is included to chelate magnesium (up to 10 mM) in enzymatic reactions, thereby stopping the reaction.



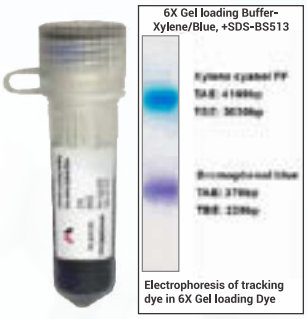
6X Gel Loading Buffer two colour-Xylene/Blue

Gel Loading buffer two colour-xylene/blue (6×) is a pre-mixed loading buffer with two tracking dyes-xylene and bromophenol blue, for agarose and non-denaturing polyacrylamide gel electrophoresis. EDTA is included to chelate magnesium (up to 10 mM) in enzymatic reactions, thereby stopping the reaction.



6X Gel Loading Buffer three colour-Xylene/Blue/Orange

Gel Loading buffer three colour-xylene/bromophenol blue/orange (6×) is a pre-mixed loading buffer with three tracking dyes- xylene, bromophenol blue and orange-G, for agarose and non-denaturing apolyacrylamide gel electrophoresis. EDTA is included to chelate magnesium (up to 10 mM) in enzymatic reactions, thereby stopping the reaction.



6X Gel Loading buffer two colour-Xylene/Blue, +SDS

Gel Loading buffer two colour with SDS (6X) is a pre-mixed loading buffer with two tracking dyes, xylene and bromophenol blue for agarose and non-denaturing polyacrylamide gel electrophoresis. This solution contains SDS, which often leads to sharper bands, as some restriction enzymes bound to DNA are lysed by SDS. EDTA is included to chelate magnesium (up to 10 mM) in enzymatic reactions, thereby stopping the reaction.

Ordering Information

Cat#	Product	Specifications
BS500	6X Gel Loading buffer-Blue	1 ml
BS500-05	6X Gel Loading buffer-Blue	5 ml
BS501	6X Gel Loading buffer two colour- (Xylene/Orange)	1 ml
BS501-05	6X Gel Loading buffer two colour- (Xylene/Orange)	5 ml
BS502	6X Gel Loading buffer two colour- (Xylene/Blue)	1 ml
BS502-05	6X Gel Loading buffer two colour- (Xylene/Blue)	5 ml
BS503	6X Gel Loading buffer three colour- (Xylene/Blue/Orange)	1 ml
BS503-05	6X Gel Loading buffer three colour- (Xylene/Blue/Orange)	5 ml
BS513	6X Gel Loading buffer two colour- (Xylene/Blue, +SDS)	1 ml
BS513-05	6X Gel Loading buffer two colour- (Xylene/Blue, +SDS)	5 ml

RNase A

RNase A is an endoribonuclease that specifically degrades single-stranded RNA at C and U residues. It cleaves the phosphodiester bond between the 5'-ribose of a nucleotide and the phosphate group attached to the 3'-ribose of an adjacent pyrimidine nucleotide. The resulting 2', 3'-cyclic phosphate is hydrolyzed to the corresponding 3'-nucleoside phosphate. Specific Activity is ≥3000 U/mg protein.

Applications

Plasmid and genomic DNA preparation
Removal of RNA from recombinant protein preparations.
Ribonuclease protection assays
Mapping single-base mutations in DNA or RNA

Ordering Information

Cat#	Product	Specifications
ZY2001	RNase A- 10 mg/ml	1 ml
ZY2002	RNase A- 20 mg/ml	1 ml

Agarose for Electrophoresis

Appearance:	:	Fine, homogenous white powder
Moisture:	:	≤10%
Gel strength (1% gel):	:	≥ 1200g/cm^2
EEO (Electroendosmosis):	:	≤0.13
Sulfide (SO_4^{2-}):	:	≤0.15%
Solubleness:	:	Colourless clear gel liquid
Ash:	:	≤ 0.5%
Solidification temperature (1.5% gel):	:	36°C±1.5°C
Thawing temperature (1.5% gel):	:	88°C±1.5°C

Ordering Information

Cat#	Product	Specifications
CB001	Agarose	100 gm
CB002	Agarose	500 gm

50X TAE Buffer (Tris-acetate-EDTA)

50X TAE Buffer (Tris-acetate-EDTA) is used for electrophoresis of nucleic acids in agarose and polyacrylamide gels. This can be used for both genomic DNA and large supercoiled DNA, as a running buffer and a gel preparation buffer. Ideal for use in other molecular biology techniques where Tris -Acetate EDTA buffer is used. 50X TAE Buffer is composed of 2 M Tris-acetate, and 0.05 M EDTA, pH 8.6.

Ordering Information

Cat#	Product	Specifications
BS504-100	50X TAE Buffer concentrate	100 ml
BS504-200	50X TAE Buffer concentrate	200 ml
BS504-500	50X TAE Buffer concentrate	500 ml

10X MOPS

10X MOPS is a zwitterionic buffer used as running buffer for RNA electrophoresis. 10X MOPS buffer is composed of MOPS, Sodium hydroxide, Sodium acetate and EDTA, pH 8.

Ordering Information

Cat#	Product	Specifications
BS505-200	10X MOPS Buffer Concentrate	200 ml
BS505-500	10X MOPS Buffer Concentrate	500 ml

10X TBE Buffer

10X TBE Buffer (Tris-borate-EDTA) is used for electrophoresis of nucleic acids in agarose and polyacrylamide gels. This can be used for both genomic DNA and DNA fragments of 0.1 to 3 kb as a running buffer and a gel preparation buffer. Ideal for use in other molecular biology techniques where Tris -borate EDTA buffer is used. 10X TBE Buffer is composed of Tris base, boric acid, and EDTA, pH 8.3.

Ordering Information

Cat#	Product	Specifications
BS506-200	10X TBE Buffer Concentrate	200 ml
BS506-500	10X TBE Buffer Concentrate	500 ml

10X MES Buffer

10X MES buffer is used as running buffer for small to medium sized, 2-50 kDa proteins on Bis-Tris gels. It contains 1M MES, 1M Tris base, 2% SDS and 20 mM EDTA

Ordering Information

Cat#	Product	Specifications
BS507-200	10X MES Buffer Concentrate	200 ml
BS507-500	10X MES Buffer Concentrate	500 ml

10X TBE Buffer

10X TBE Buffer (Tris-borate-EDTA) is used for electrophoresis of nucleic acids in agarose and polyacrylamide gels. This can be used for both genomic DNA and DNA fragments of 0.1 to 3 kb as a running buffer and a gel preparation buffer. Ideal for use in other molecular biology techniques where Tris -borate EDTA buffer is used. 10X TBE Buffer is composed of Tris base, boric acid, and EDTA, pH 8.3.

Ordering Information

Cat#	Product	Specifications
BS506-200	10X TBE Buffer Concentrate	200 ml
BS506-500	10X TBE Buffer Concentrate	500 ml

25X PBS

25X PBS is isotonic and non-toxic buffer to cells with physiological pH 7.4 and is widely used as a diluent and wash buffer for cell culture and molecular biology studies

Ordering Information

Cat#	Product	Specifications
BS509-100	25X PBS Buffer Concentrate	100 ml
BS509-500	25X PBS Buffer Concentrate	500 ml

25X PBS with Tween 20

25X PBS with Tween 20 is isotonic and non-toxic buffer to cells with physiological pH 7.4 and is widely used as a diluent, wash buffer and blocking buffer for cell culture and molecular biology studies.

Ordering Information

Specifications	Product	Cat#
100 ml	25X PBS Buffer Concentrate with Tween 20	BS510-100
500 ml	25X PBS Buffer Concentrate with Tween 20	BS510-500

10% SDS

10% SDS is ready to use anionic detergent used to denature secondary and tertiary structure of proteins. It is mainly used for SDS-PAGE, plasmid extraction, protein immobilization and structure determination studies

Ordering Information

Cat#	Product	Specifications
BS511-50	10% SDS Solution	50 ml
BS511-100	10% SDS Solution	100 ml

0.5 M EDTA Soltion, pH 8

0.5 M EDTA Soltion, pH 8, is a chelator of divalent cations. It is widely used in biochemistry and molecular biology

Ordering Information

Cat#	Product	Specifications
BS512-100	0.5 M EDTA Solution, pH 8.0	100 ml
BS512-500	0.5 M EDTA Solution, pH 8.0	500 ml

Upcoming products

Cat#	Chemical	Specification
CB011-S	Boric Acid	100 gm
CB021-S	Calcium Chloride	100 gm
CB022-S	Citric Acid Ahydrous	100 gm
CB023-S	CTAB	100 gm
CB031-S	D Glucose	100 gm
CB032-S	Di Potassium Hydrogen Phosphate	100 gm
CB033-S	Di Sodium Hydrogen Phosphate	100 gm
CB041-S	EDTA Disodium Salt	100 gm
CB061-S	Glycine	100 gm
CB121-S	MES free acid	100 gm
CB122-S	MES sodium salt	100 gm
CB071-S	HEPES free acid	100 gm
CB151-S	Potassium Dihydrogen Phosphate	100 gm
CB181-S	Sodium Chloride	100 gm
CB182-S	Sodium Dihydrogen Phosphate	100 gm
CB183-S	Sucrose	100 gm
CB191-S	Tris base	100 gm
CB192-S	Tris HCl	100 gm
CB201-S	Urea	100 gm

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