BioLit^{IM} PCR Reagents

Robust Amplification with Taq DNA Polymerase, Master Mixes, PCR Kits & many more

Driven by rapid technological advancements in Polymerase Chain Reactions (PCR) and DNA Sequencing which are key players in Life Science Research and Clinical Diagnostics, the **SRL BioLit™** product line offers its wide range of PCR reagents which are of high quality, economical and convenient to use.

Taq DNA Polymerase

Taq DNA Polymerase is a highly thermostable enzyme widely used in PCR for its ability to catalyze the $5' \rightarrow 3'$ synthesis of DNA.

SRL BioLit™ offers a wide range of Taq DNA polymerases which are accompanied by appropriate buffers (with/without MgCl₂) and 6× loading dye.

Key Features:

- Highly purified Tag DNA Polymerase
- Sourced from a Recombinant Strain
- Ideal for standard PCR/labeling/sequencing
- Available in small, medium and bulk pack sizes to cover all requisites of a lab/researcher/student
- Offered as Combo packs of Taq DNA polymerase, buffers, MgCl₂ and dNTP mix & available with every type of Taq polymerase, helping the researchers optimize the components according to their experimental needs.

Synopsis for SRL's Taq DNA Polymerases

| | Product Code | Product Name | Amplicon length | Proof reading | Elongation velocity | TA cloning | Product end | Features | Pkg |
|---|-----------------|--|--------------------|------------------|---------------------|---------------|------------------------------------|--|---|
| Everyday-use Polymerase | 61524 | TAQ DNA Polymerase (1U/µI) | Upto 5 kb | - | 0.9-1.2kb/min | + | 3'-dA Overhangs | Amplification of DNA fragments, PCR cloning, labeling, sequencing | 500 units, 1000 units & 5000 units |
| | 32976 | TAQ DNA Polymerase $(3U/\mu I)$ | Upto 5 kb | - | 0.9-1.2kb/min | + | 3'-dA Overhangs | Amplification of DNA fragments, PCR cloning, labeling, sequencing | 500 units, 1000 units, 5000 units & 10000 units |
| | 82487 | TAQ DNA Polymerase $(5U/\mu I)$ | Upto 5 kb | - | 0.9-1.2kb/min | + | 3'-dA Overhangs | Amplification of DNA fragments, PCR cloning, labeling, sequencing | 500 units, 1000 units, 3000 units & 5000 units |
| aryday-us | 12816 | TAQ DNA Polymerase $(5U/\mu I)(w/6 \times Buffer)$ | Upto 5 kb | - | 0.9-1.2kb/min | + | 3'-dA Overhangs | Amplification of DNA fragments, PCR cloning, labeling, sequencing | 500 units, 1000 units, 5000 units & 10000 units |
| Eve | 51613 | TAQ DNA Polymerase $(5U/\mu I)(w/6 \times Buffer, w/dNTP)$ | Upto 5 kb | - | 0.9-1.2kb/min | + | 3'-dA Overhangs | Amplification of DNA fragments, PCR cloning, labeling, sequencing | 500 units, 1000 units, 5000 units & 10000 units |
| | 45758 | TAQ DNA Polymerase (5U/µI) (Large) | Upto 5 kb | - | 0.9-1.2kb/min | + | 3'-dA Overhangs | Amplification of DNA fragments, PCR cloning, labeling, sequencing | 18000 units |
| High specificity Polymerase | 46033 | HSP TAQ DNA Polymerase $(5U/\mu I)$ | Upto 5 kb | - | 0.9-1.2kb/min | + | 3'-dA Overhangs | Highly specific incorporation of primer and template | 500 units & 1000 units |
| | 79383 | HSP TAQ DNA Polymerase $(5U/\mu I)$ (Large) | Upto 5 kb | - | 0.9-1.2kb/min | + | 3'-dA Overhangs | Highly specific incorporation of primer and template | 18000 units |
| High Fidelity Polymerase | 22774 | Pfu DNA Polymerase $(5U/\mu I)$ | Upto 2 kb | + | 0.2-0.4kb/min | - | Blunt ends | 10 times the fidelity of Taq DNA polymerase | 250 units & 1000 units |
| | 49069 | Pfu DNA Polymerase $(5U/\mu I)$ (w/ dNTP) | Upto 2 kb | + | 0.2-0.4kb/min | - | Blunt ends | 10 times the fidelity of Taq DNA polymerase | 250 units & 1000 units |
| | 85737 | TAQ Plus DNA Polymerase (2.5U/ μ I) | Upto 20 kb | + | 0.6-0.8kb/min | + | 3'-dA Overhangs | 4 times the fidelity of Taq DNA polymerase | 250 units & 1000 units |
| | 93561 | TAQ Plus DNA Polymerase $(2.5 \text{U}/\mu\text{I})(\text{w}/\text{dNTP})$ | Upto 20 kb | + | 0.6-0.8kb/min | + | 3'-dA Overhangs | 4 times the fidelity of Taq DNA polymerase | 250 units & 1000 units |
| Long template amplifying Polymerase | 15367 | Long TAQ DNA Polymerase $(5\text{U}/\mu\text{I})$ | Upto 20 kb | - | 0.9-1kb/min | + | 3'-dA Overhangs & Blunt ends | 3 times the fidelity of Taq DNA polymerase | 250 units & 1000 units |
| | 94126 | Long TAQ DNA Polymerase (5U/µI)(w/dNTP) | Upto 20 kb | - | 0.9-1kb/min | + | 3'-dA Overhangs & Blunt ends | 3 times the fidelity of Taq DNA polymerase | 250 units & 1000 units |
| Highly efficient & Fast elongating Polymerase | 58235 | FSP TAQ DNA Polymerase $(5\text{U}/\mu\text{I})$ | Upto 5 kb | - | 3kb/min | + | 3'-dA Overhangs | High amplification efficiency and fast elongation - 2× higher than regular Taq DNA polymerase | 250 units, 1000 units & 3000 units |
| | 70073 | FSP TAQ DNA Polymerase (5U/µI)(w/dNTP) | Upto 5 kb | - | 3kb/min | + | 3'-dA Overhangs | High amplification efficiency and fast elongation - 2× higher than regular Taq DNA polymerase | 250 units, 1000 units & 3000 units |

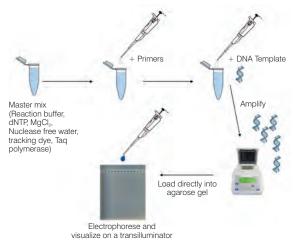
PCR Master Mixes

SRL BioLit™ offers a variety of ready-to-use Master Mixes, comprising of various components necessary for setting up PCR reactions albeit sans primers and template.

Our Master Mixes are mixed with a tracking dye which facilitates the user in loading the sample directly on to the agarose gel after amplification.

Key Features:

- Pre-mixed formulations prevents handling and pipetting errors
- Time saving and reduces chance of contamination
- Provides optimum conditions for PCR application
- Users only need to add primers and DNA Template



Graphical description to add to PCR Master Mix

Synopsis for SRL's PCR Master Mixes

| Product Code | Product Name | Components | Pkg |
|-----------------|---|---|---------------------------------|
| 50900 | Taq Mix (2×) | Taq Polymerase, Reaction Buffer, Mg ²⁺ , dNTP & tracking dye | 1ml (40 rxns) & 5×1ml (200rxns) |
| 94531 | Pfu Mix (2×) | Pfu DNA Polymerase, dNTP, MgSO ₄ , Reaction Buffer & tracking dye | 1ml (40 rxns) & 5×1ml (200rxns) |
| 23782 | Plus Mix (2×) | Taq Plus DNA Polymerase, dNTP, $\mathrm{MgCl}_{\scriptscriptstyle 2},$ Reaction Buffer & tracking dye | 1ml (40 rxns) & 5×1ml (200rxns) |
| 66677 | HSP Mix (2×) | HSP Taq Polymerase, Reaction Buffer, Mg ²⁺ , dNTP & tracking dye | 1ml (40 rxns) & 5×1ml (200rxns) |
| 36250 | Long Taq Mix (2×) | Long Taq Polymerase, Reaction Buffer, $\mathrm{Mg}^{\mathrm{2+}}$, dNTP & tracking dye | 1ml (40 rxns) & 5×1ml (200rxns) |
| 11307 | FSP Taq Mix (2×) | FSP Taq Polymerase, Reaction Buffer, Mg ²⁺ , dNTP & tracking dye | 1ml (40 rxns) & 5×1ml (200rxns) |
| 84729 | FSP Taq Mix Direct for blood (2 \times) | FSP Taq Polymerase, Reaction Buffer, Mg ²⁺ , dNTP & tracking dye | 1ml (40 rxns) & 5×1ml (200rxns) |
| 20220 | FSP Taq Mix Direct for tissue (2 \times) | FSP Taq Polymerase, Reaction Buffer, Mg ²⁺ , dNTP & tracking dye | 1ml (40 rxns) & 5×1ml (200rxns) |

* Bulk pack sizes available on request # All BioLit $^{\text{TM}}$ products are delivered with a complete Product Insert



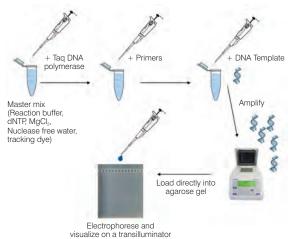
PCR Kits

SRL BioLit™ understands that users & researchers may also wish to optimize some of the components for PCR based on their experimental requisites, therefore we offer various PCR Kits which comprise of different kinds of Taq polymerases, ready-to-use 2× Reaction Mix with optimized reaction buffer, dNTP, MgCl₂ and tracking dyes.

Vials of $(5 \times 1 \text{ml})$ of $2 \times \text{Reaction Mixes can be used for } 200 \text{ reactions}$.

Key Features:

- · Ready-to-use
- Saves time and pipetting error.
- Provides optimum conditions for PCR application
- Users only need to add primers and DNA Template



Graphical description to add to PCR Kits

Synopsis for SRL's PCR Kits

| Product Code | Product Name | Kit components | Pkg |
|-----------------|-----------------------|--|-----------------|
| 11405 | PCR Kit (Taq Mix Kit) | Taq DNA polymerase (2.5U/ μ I), 2 \times PCR Reaction Mix | 5×1ml (200rxns) |
| 61090 | HSP Kit | HSP DNA polymerase (2.5U/ μ l), 2× HSP Reaction Mix | 5×1ml (200rxns) |
| 75906 | Long Taq Kit | Long Taq DNA polymerase (2.5U/ μ I), 2× Long Taq Reaction Mix & PCR enhancer | 5×1ml (200rxns) |
| 93658 | FSP Kit | FSP DNA polymerase (2.5U/ μ I), 2× FSP Reaction Mix | 5×1ml (200rxns) |
| 12770 | Pfu Kit | Pfu DNA polymerase (2.5U/ μ I), 2× Pfu Reaction Mix | 5×1ml (200rxns) |

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RT-PCR Kit

This kit is optimized to synthesize first-strand cDNA from purified poly (A)+ or total RNA and delivers increased cDNA yields, high sensitivity, and full-length transcripts in a convenient format.

All the components needed for successful first-strand cDNA synthesis are included, thus saving time and ensuring success with every experiment.

Synopsis for SRL's RT-PCR Kit

| Product Code | Product Name | Kit components | Pkg |
|-----------------|--------------|--|----------------------|
| 94837 | RT-PCR Kit | M-MLV (200U/ μ I), RNasin (40U/ μ I), Oligo(dT)15 primer (50 μ M), Random hexamer primer(50 μ M), 5× First-strand Buffer, RNase-free Water, dNTP mix (10mM each) | 20 preps & 100 preps |

dNTP Mixes & Sets

SRL BioLit™ offers high quality dNTP as Mixes & Sets and also as individual dNTP solutions, which play an important role in applications such as DNA Amplification, cDNA Synthesis, DNA Labeling and DNA Sequencing. In our chemical sections of the catalogue, these dNTP are also offered as highly pure lyophilized powders.

Key Features:

dNTP Mixes

- Ready-to-use
- Used in all kinds of PCR applications
- Saves time & reduces error

dNTP Sets

• Offers maximum flexibility in preparation of reaction buffer.

Individual dNTP's

• Offers freedom to toggle with the concentration of the nucleotide

Synopsis for SRL's dNTP Mixes & Sets

| Product Code | Product Name | Kit components | Pkg |
|-----------------|---|---|--|
| 70596 | dNTP mix (2.5mM each) Ready-to-use aqueous solution at pH 7.0 containing dATP, dCTP, dGTP and dTTP, each at a final concentration of 2.5mM | | 1ml, 5×1ml |
| 52618 | dNTP mix (10mM each) RNase free | Ready-to-use aqueous solution at pH 7.0 containing dATP, dCTP, dGTP and dTTP, each at a final concentration of 10mM and assuredly free of RNase contamination | 0.5ml |
| 18821 | dNTP mix (10mM each) | Ready-to-use aqueous solution at pH 7.0 containing dATP, dCTP, dGTP and dTTP, each at a final concentration of 10mM | 1ml, 5×1ml |
| 14464 | dNTP mix (25mM each) | Ready-to-use aqueous solution at pH 7.0 containing dATP, dCTP, dGTP and dTTP, each at a final concentration of 25mM | 1ml, 5×1ml |
| 69478 | dNTP set (10mM each) | 10mM aqueous solutions of dATP, dTTP, dCTP and dGTP each supplied in separate vials – offering maximum flexibility in preparation of reaction mixes for different applications | 4×0.1 ml 4×0.5 ml $5\times(4\times0.2$ ml) |
| 94903 | dNTP set (100mM each) | 100mM aqueous solutions of dATP, dTTP, dCTP and dGTP each supplied in separate vials – offering maximum flexibility in preparation of reaction mixes for different applications | 4×0.25 ml 4×1 ml 4×5 ml |
| 72009 | dATP (100mM) | 100mM aqueous solution of dATP | 0.2ml, 0.5ml |
| 91474 | dTTP (100mM) | 100mM aqueous solution of dTTP | 0.2ml, 0.5ml |
| 19809 | dCTP (100mM) | 100mM aqueous solution of dCTP | 0.2ml, 0.5ml |
| 47435 | dGTP (100mM) | 100mM aqueous solution of dGTP | 0.2ml, 0.5ml |

PCR Buffers & Other Solutions

SRL BioLit™ also offers other reagents which are PCR accessories. The ready-to-use, highly optimized reagents are helpful to users and assist in reducing handling and pipetting errors and saving valuable time in its preparations. These reagents are already optimized with **SRL**'s Polymerases and ensure complete success.

Synopsis for SRL's PCR Buffers & Other Solutions

| Product Code | Product Name | Features | Pkg |
|-----------------|---|--|----------------------|
| 61318 | 10× PCR Buffer with KCI (Mg ²⁺ free) | Reaction buffer free of $\mathrm{MgCl_2}$ – for researchers who wish to optimize their PCR reaction components | 4×1.25ml |
| 41212 | 10× PCR Buffer with 15mM Mg ²⁺ | Reaction buffer with MgCl ₂ – for standard PCR reactions | 4×1.25ml |
| 43386 | 10× PCR Buffer with Mg ²⁺ set | Six Reaction buffers with varying concentrations of ${\rm MgCl_2}$ – for researchers who wish to vary their ${\rm Mg^{2^+}}$ concentration in PCR reaction | 6×1.25ml |
| 86687 | 25mM MgCl ₂ | PCR component used by researchers who wish to vary their ${\rm Mg}^{2+}$ concentration according to their PCR requirement | 4×1.25ml |
| 96370 | Water, nuclease free | Molecular biology requirement Water, de-ionized and sterlie | 5×1ml, 100ml & 500ml |
| 66886 | DEPC-treated Water | Requirement for RNA experiments – Water de-ionized, diethylpyrocarbonate (DEPC) treated and sterlie | 100ml |
| 20870 | PCR enhancer | Used with DNA polymerases, a PCR co-solvent that facilitates efficient amplification of GC-rich sequences and remedies difficulties with problematic templates | 0.5ml |
| 52531 | PCR Sample Preparation Solution | Solution used to prepare sample (tissues, hair, buccal swabs, bacterial cells, serum & virus) for PCR | 50 preps & 200 preps |

* Bulk pack sizes available on request

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