SNP Taq DNA Polymerase

Ordering info:

Concentration: 20 U/µL	
Cat No.	Size
P0055	500 U
P0056	2,500 U

Includes for 500 U:

- SNP Taq DNA Polymerase (20 U/ µL)
- Reaction Buffer (5x) without $MgCl_2$
- 100mM $MgCl_2$

Description:

SNP Taq DNA Polymerase is an efficient, High Fidelity and specific Hot-Start Polymerase with special N-terminal deletion and proprietary amino acids substitutions introduced into the active domine of the enzyme. Due this special modification the enzyme increases its sensitivity to mismatches at 3'-end of the primer. For this reason, unspecific amplicons are formatted due the non-perfect primers annealing.

Advantages & Features:

- **Efficient:** 10 to 15-fold lower mutation rate than normal Taq DNA Polymerase.
- **High Versatility:** allele-specific amplification of DNA fragments.
- **High Specificity:** lowest background AS-PEX and AS-PCR.
- **Cost avoidance:** reduce the use of expensive primer dimers.

Unit definition:

One unit is defined as the amount of enzyme that incorporates 10 nmoles of dNTPs into acid-insoluble form in 30 minutes at 72°C.

Applications:

- High specific or Multiplex PCR.
- Real-Time PCR with intercalation dyes.
- High Fidelity dNTPs and ddNTPs.
- Mini Sequencing procedures.
- Allele-specific primer extension (AS-PEX).
- SNP genotyping by allele-specific PCR (AS-PCR).
- Single Nucleotide Polymorphism (SNP).

Quality control:

- Functionally tested in PCR.
- Free of bacterial DNA (by PCR).
- Exempt of nucleases (endo, exo and ribonucleases) activities guaranteed by appropriate quality tests.

Related products:

- TruePure™ dNTPs (p.115)
- BrightMAX™ DNA Ladders (p.116)
- Custom solutions (p.147)

AMV Reverse Transcriptase

Ordering info:

Cat No.	Size
P0070	300 U
P0071	1,000 U

Includes:

- AMV Reverse Transcriptase (10U/µL)
- Reaction Buffer (5x)

Description:

AMV Reverse Transcriptase, encoded by Avian Myeloblastosis Virus (AMLV) is an RNA dependent DNA polymerase that synthesizes the complementary cDNA first strand from a single-stranded RNA template. AMV Reverse Transcriptase (AMV RT) catalyzes the polymerization of DNA using template DNA, RNA or RNA:DNA hybrids.

Applications:

- RT PCR.
- Synthesis of cDNA.
- RNA Sequencing.

Quality control:

- Exempt of nucleases (endo, exo and ribonucleases) activities.
- Purity: >90% as judged by SDS-polyacrylamide gels with blue staining.

MMLV Reverse Transcriptase

Ordering info:

Cat No.	Size
P0073	10,000 units
P0074	5 x 10,000 units

Includes:

- MMLV Reverse Transcriptase (200U/µL)
- Reaction Buffer (5x)

Description:

MMLV Reverse Transcriptase (MMLV-RT), encoded by Moloney Murine Leukemia Virus (MMLV) is an RNA-dependent DNA polymerase that synthesizes the cDNA first strand from a single-stranded RNA template to which a primer has been hybridized. MMLV-RT will also extend primers hybridized to single-stranded DNA.

Applications:

- RT PCR.
- Synthesis of cDNA.
- mRNA 5'-end Mapping by Primer Extension Analysis.
- End-labeling of DNA.
- Dideoxynucleotide Sequencing.

Quality control:

- Exempt of nucleases (endo, exo and ribonucleases) activities.
- Purity: >90% as judged by SDS-polyacrylamide gels with blue staining.