



Apto-Life offers PCR and (RT-)qPCR enzymes and master mixes developed for the most challenging assays and cutting-edge experimental demands in the life sciences sector. Our expertise and advanced molecular technologies enable optimal product performance across a wide range of applications and sample types.

Apto-Life products have been developed for use in a broad range of life science applications. Our (RT-)qPCR solutions are ideally suited for monitoring gene expression and transcript copy number variations in drug dose response assays, and in the study of infectious and genetic diseases. Our hot-start PCR solutions are ideal for rapid SNP genotyping and biomarker testing, whilst our high-fidelity enzyme technology provides accurate, long PCR for cloning, site-directed mutagenesis, and constructing vector and DNA libraries.

For more information about Apto-Life and our products:
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Gene Expression

Apto-Life has developed a broad range of high-quality solutions for studying gene expression and genomics to suit the needs of modern molecular research laboratories. Reverse transcription real-time PCR (RT-qPCR) is a well-established and cost-effective technique that provides valuable insights into gene responses to biological conditions such as pathogen infection, disease states, differentiation status and more. Apto-Life offers high-performance and accurate cDNA synthesis, qPCR and one-step RT-qPCR solutions for gene expression studies.

RevScript cDNA Synthesis Mix

RevScript cDNA Synthesis Mix has been developed for rapid and sensitive cDNA synthesis and delivers both highly efficient first-strand synthesis and high cDNA yields, leading to greater reproducibility and data accuracy.

The two-tube format includes a high-performance 20x RevScript Reverse Transcriptase, blended with RNase inhibitor, and 5x cDNA Synthesis Mix containing an optimized ratio of random hexamer primers and anchored oligo(dT) primers. 20x RevScript Reverse Transcriptase exhibits enhanced thermostability and processivity for robust cDNA synthesis from highly structured and complex RNA templates.

FEATURES

Reproducible, high-yield cDNA

Detect low-copy transcript

cDNA synthesis in under 25 minutes

INFO

| Pack code | Product name | Pack size |
|------------|------------------------------|-----------|
| APL5010.5 | RevScript cDNA Synthesis Mix | 50 rxn |
| APL5010.25 | RevScript cDNA Synthesis Mix | 250 rxn |

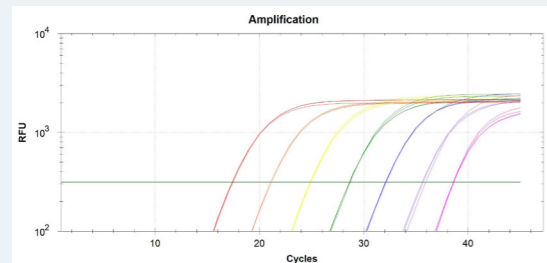
RELATED PRODUCTS

| | | |
|-----------|---------------------------------|------------|
| APL5015.5 | RevScript cDNA Synthesis Kit | 50 rxn |
| APL5005.2 | RevScript Reverse Transcriptase | 2000 units |
| APL1025.2 | dUTP Mix | 20 µmol |

Apto-Life qPCR and RT-qPCR master mixes offer convenient solutions for two-step and one-step RT-qPCR protocols. These solutions are designed to amplify an array of targets, including cDNA, complex GC-rich genomic sequences, as well as viral DNA and RNA. Providing consistently high performance, the mixes are optimized for reliable detection and quantification over a broad dynamic range. Apto-Life qPCR and RT-qPCR mixes are provided in a ready-to-use master mix format and are compatible with all commonly used qPCR platforms (see compatibility chart on Page 4).

SyGr qPCR Mix Blue

SyGr qPCR Mix Blue contains a visualization dye to enable high-throughput qPCR users to easily identify dispensed reaction wells, in both clear and opaque PCR plates. SyGr qPCR Mix Blue also provides the same high qPCR efficiency and sensitivity as our colorless qPCR master mixes from the Apto-Life product range.



High efficiency qPCR of inactivated native Respiratory Syncytial Virus (RSV) over six orders of magnitude

FEATURES

High sensitivity and speed

Efficient qPCR over a wide dynamic range

Easy-to-visualize in-plate reactions

INFO

| Pack code | Product name | Pack size |
|------------|--------------------|-----------|
| APL2045.5 | SyGr qPCR Mix Blue | 50 rxn |
| APL2045.50 | SyGr qPCR Mix Blue | 500 rxn |

RELATED PRODUCTS

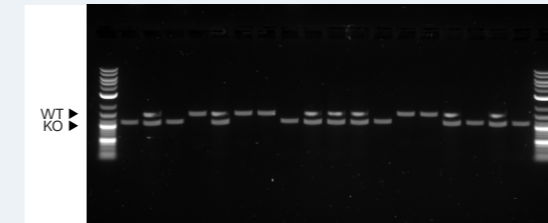
| | | |
|-----------|-------------------|--------|
| APL2015.5 | SyGr RT-qPCR Mix | 50 rxn |
| APL2025.5 | Probe qPCR Mix | 50 rxn |
| APL2005.5 | Probe RT-qPCR Mix | 50 rxn |

Genotyping

Genotyping is a commonly used research technique for the identification and comparison of subtle genetic variations between individual or large groups of samples. Apto-Life offers a range of high-quality DNA polymerases and master mixes for allele-specific SNP detection, and mouse-tailing and colony PCR. Our technology provides accurate amplification and genotyping of complex genomic DNA from a variety of specimens including human, animal, plant, bacteria, and fungi.

HS Taq Mix Red

HS Taq Mix Red is optimized for amplification across a broad dynamic range of DNA templates of various lengths (up to 3 kb) and complexity. It is available as a PCR master mix or as separate hot-start Taq polymerase and buffer to enable user optimization.



Mouse tail PCR to identify transgene integration efficacy. Agarose gel electrophoresis shows knock-out (KO; 1.4 kb), wild-type (WT; 2.1 kb), and heterozygous (1.4 and 2.1 kb) genotypes

FEATURES

Suitable for routine hot-start PCR

Low-copy target amplification

Red visualization dye for direct gel loading

INFO

| Pack code | Product name | Pack size |
|------------|----------------|-----------|
| APL3020.5 | HS Taq Mix Red | 50 rxn |
| APL3020.20 | HS Taq Mix Red | 200 rxn |

RELATED PRODUCTS

| | | |
|-------------|-----------------------|----------|
| APL3010.5 | Taq PCR Mix Red | 50 rxn |
| APL3015.5 | HS Taq PCR Mix | 50 rxn |
| APL4005.005 | HS Taq DNA Polymerase | 50 units |

Cloning

PCR is fundamental to most cloning strategies due to its high accuracy, efficiency and low-cost. Apto-Life has engineered fast, high-fidelity DNA polymerases for applications that require high accuracy amplification, such as cloning and subcloning for vector generation, and DNA library constructions.

SsoPfu DNA Polymerase

SsoPfu DNA Polymerase is a high-fidelity and highly processive DNA polymerase designed for cloning of long sequences and DNA library preparations. The polymerase has been engineered for amplification of highly-structured, GC-rich templates minimizing sequence bias for DNA sequencing projects.

SsoPfu DNA Polymerase is available as a separate enzyme and buffer or as a ready-to-go PCR master mix.

FEATURES

Fast, high-processivity DNA Polymerase

50-fold higher fidelity than Taq

Amplification up to 10 kb from human gDNA

INFO

| Pack code | Product name | Pack size |
|-------------|-----------------------|-----------|
| APL4035.005 | SsoPfu DNA Polymerase | 50 units |
| APL4035.05 | SsoPfu DNA Polymerase | 500 units |

RELATED PRODUCTS

| | | |
|-------------|--------------------------|--------|
| APL3050.5 | SsoPfu PCR Mix | 50 rxn |
| Coming soon | HS SsoPfu DNA Polymerase | - |
| Coming soon | HS SsoPfu PCR Mix | - |

HS Taq Plus DNA Polymerase

HS Taq Plus DNA Polymerase is a fast and higher fidelity Taq DNA polymerase which has been developed for amplification of long targets and PCR cloning into TA vectors. Owing to its intrinsic enhanced inhibitor tolerance and advanced buffer chemistry, HS Taq Plus DNA Polymerase can amplify highly structured DNA from crude samples.

HS Taq Plus DNA Polymerase is available as a separate enzyme and buffer or as a ready-to-go PCR master mix.

FEATURES

Compatible with TA cloning

5-fold higher fidelity than Taq

Rapid PCR up to 5 kb from human gDNA

INFO

| Pack code | Product name | Pack size |
|-------------|----------------------------|-----------|
| APL4010.005 | HS Taq Plus DNA Polymerase | 50 units |
| APL4010.05 | HS Taq Plus DNA Polymerase | 500 units |

RELATED PRODUCTS

| | | |
|-------------|-------------------------|----------|
| APL4020.005 | Taq Plus DNA Polymerase | 50 units |
| APL3030.5 | HS Taq Plus PCR Mix Red | 50 rxn |
| APL3035.5 | Taq Plus PCR Mix | 50 rxn |

qPCR Platform Compatibility Chart

| Instrument Model | | Apto-Life Product | |
|--------------------|---|---------------------------|------------|
| Applied Biosystems | QuantStudio 3/5/6/7/12K Flex, ViiA 7, 7500, 7500 Fast | Probe qPCR Mix | APL2025.50 |
| Agilent/Stratagene | MX4000P, MX3005P, MX3000P, AriaMX, AriaDX | Probe RT-qPCR Mix | APL2005.50 |
| Bio-Rad | CFX Opus 96/384/Deepwell, CFX Duet | SyGr qPCR Mix | APL2035.50 |
| BMS | Mic | SyGr qPCR Mix Blue | APL2045.50 |
| Eppendorf | Mastercycler ep realplex | SyGr RT-qPCR Mix | APL2015.50 |
| Qiagen/Corbett | Rotor-Gene Q/3000/6000 | | |
| Roche | LightCycler 96/384/Nano | | |
| Applied Biosystems | 7900HT, 7700, 7300, 7000, StepOne, StepOnePlus | Probe qPCR Hi-ROX Mix | APL2030.50 |
| | | Probe RT-qPCR Hi-ROX Mix | APL2010.50 |
| | | SyGr qPCR Hi-ROX Mix | APL2040.50 |
| | | SyGr qPCR Hi-ROX Mix Blue | APL2050.50 |
| | | SyGr RT-qPCR Hi-ROX Mix | APL2020.50 |

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