



REVERSE TRANSCRIPTION PCR & cDNA Synthesis

Achieve Remarkable RT-PCR RESULTS in just ONE STEP

Reverse transcription polymerase chain reaction (RT-PCR) is a powerful and sensitive technique that uses RNA as starting template to produce complementary single-stranded DNA (cDNA), then uses PCR to amplify the cDNA either in one-step or two-step RT-PCR. Vivantis Technologies is confident in providing you various high-quality RT-PCR products for superior results, even with challenging RNA samples.

2X OneStep Taq ReverseTrans PCR Master Mix

2X OneStep Taq ReverseTrans PCR Master Mix offers rapid and sensitive end-point detection of RNA templates in a single step. 2X OneStep Taq ReverseTrans PCR Master Mix is an optimized ready-to-use 2X concentrated RNA amplification mixture containing M-MuLV Reverse Transcriptase, RNase Inhibitors, Taq DNA Polymerase, reaction buffer and dNTPs. It contains all the components required for routine RNA amplification except template and primers. M-MuLV Reverse Transcriptase has the absence of RNase H activities that enhance the synthesis of long cDNAs and amplification of long transcripts. 2X OneStep Taq ReverseTrans PCR Master Mix allows cDNA synthesis and PCR to be performed using only gene-specific primers.

Features

- Saves time and reduces contamination due to reduced number of tests and pipetting steps
- Stable at 4°C for 6 months, allowing immediate reaction setup without the time-consuming thawing of reagent
- Suitable for all routine RNA amplification applications

Ordering information:

Catalogue No.	Description	Pack Size
RTMM01	2X OneStep Taq ReverseTrans PCR Master Mix	100 applications



2X ViRed OneStep Taq ReverseTrans PCR Master Mix

2X ViRed OneStep Taq ReverseTrans PCR Master Mix contains the inert red dye and stabilizers that allow direct loading of final PCR products onto gels for electrophoresis. The red color dye migrates at approximately 400bp on 1% agarose gel in 1X TBE Buffer.

Ordering information:

Catalogue No.	Description	Pack Size
RTMM02	2X ViRed OneStep Taq ReverseTrans PCR Master Mix	100 applications

Features

- Suitable for all routine RNA amplification applications
- Reduces set-up time and buffer-dye mixing
- Minimizes potential contamination due to reduced number of tests and pipetting steps
- Easy confirmation of complete mixing
- No additional loading dye needed – direct loading of final products onto gels





Viva cDNA Synthesis Kit


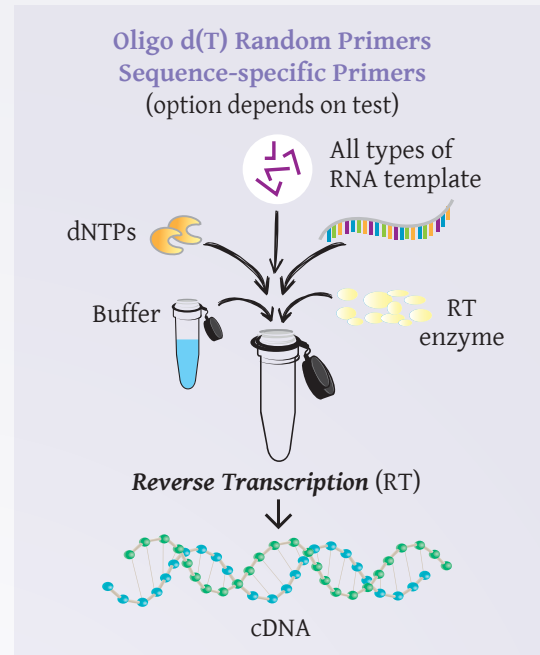
Viva cDNA Synthesis Kit is specially designed to provide reliable synthesis of full-length cDNA. M-MuLV RNase H-synthesizes complementary DNA strand initiating from a specific primer, oligo d(T) or random hexamer. This cDNA synthesis kit is readily compatible with various cDNA-dependent downstream applications.

Features

- Absence of RNase H activity allows high yield of full length cDNA synthesis with RNA templates up to 10kb
- Wide selection of primers, oligo d(T) or random hexamer
- Highly compatible with various downstream applications
- Allows synthesis of full length cDNA from various RNA templates
- High capacity and able to copy up to 2µg of purified mRNA

Ordering information:

Catalogue No.	Description	Pack Size
cDSK01-050	Viva cDNA Synthesis Kit	50 reactions
cDSK01-100	Viva cDNA Synthesis Kit	100 reactions

Viva 2-step RT-PCR Kit

Viva 2-step RT-PCR kit is specially designed to provide reliable synthesis of long full-length cDNA (Box 1) and convenient application of cDNA in PCR (Box 2). M-MuLV Reverse Transcriptase is having the absence of RNase H enhances the synthesis of long cDNA as RNA strand does not degraded in DNA-RNA hybrid during first strand cDNA synthesis. With variety of kit options for standard PCR and long PCR, Viva 2-step RT- PCR kit provides flexibility in an easy-to-use format.

Features

- Absence of RNase H activity allows high amount of full length cDNA synthesis with RNA templates up to 10kb
- Wide selection of primers, oligo d(T) or random hexamer with *Taq* DNA Polymerase and *MaxTaq* DNA Polymerase for amplification for short and long DNA fragments

DNA Polymerases Selection Chart

Properties	<i>Taq</i> DNA Polymerase	<i>MaxTaq</i> DNA Polymerase
Half Life	50 cycles	> 50 cycles
Target Length	Up to 8kb	Up to 40kb
Error Rate	1-2 x 10 ⁻⁵	1 x 10 ⁻⁶
Units / 50µl Reaction	2.0U	0.5-2.0U
Proofreading Activity		Yes
Fidelity vs <i>Taq</i>	1X	8-10X
PCR Product End	3'A	Blunt / 3'A
High Yield		Yes
High Fidelity		Yes
Applications		
Routine PCR	Yes	Yes
Long PCR		Yes
Colony PCR	Yes	
TA Cloning	Yes	
GC-rich Targets	Yes	
Long Amplicon		Yes
Palindrome / Multiple Repeats		Yes
Multiplex Amplification		Yes



Ordering information:

Catalogue No.	Description	Pack Size
RTPL12	Viva 2-Step RT-PCR kit with M-MuLV RT / <i>Taq</i> DNA Polymerase	100 applications
RTPL16	Viva 2-Step RT-PCR Kit with M-MuLV RT / <i>Chromo Taq</i> DNA Polymerase	100 applications
RTPL22	Viva 2-Step RT-PCR Kit with M-MuLV RT / <i>MaxTaq</i> DNA Polymerase	100 applications
RTPL26	Viva 2-Step RT-PCR Kit with M-MuLV RT / <i>Chromo MaxTaq</i> DNA Polymerase	100 applications