vivantis

POLYMERASES & MODIFYING ENZYMES

Product Datasheet

AMV Reverse Transcriptase (Recombinant)

Product No : ME2301
Quantity : 500u

Lot :
Expiry Date :
Concentration : 20u/µl
Supplied with : 10X Buffer AMV-RT
(New improved buffer system)
Store at -70°C for long term periods
Store at -20°C for short term (1 month)

info@vivantechnologies.com

Description:
Avian Myeloblastosis Virus (AMV) Reverse Transcriptase is an RNA dependent DNA polymerase (αβ holoenzyme) with molecular weight of 157,000 daltons. This enzyme can synthesize a complementary DNA strand initiating from a primer using either RNA (cDNA synthesis) or single-stranded DNA as a template.

Features:
- Ultra pure recombinant protein.
- Maintains the RNA- and DNA-dependent DNA polymerase and RNase H activities.
- RNase H activities can be regulated over a wide range of temperatures.
- Capable of synthesizing cDNA over a wide range of temperatures.

Unit Definition:
1u is defined as the amount of enzyme that is required to incorporate 1nmol of dTMP into acid-insoluble material in 10 minutes at 37°C using Poly(rA)•$(dT)_{12-18}$ as a template primer.

Assay Conditions:
50mM Tris-HCl (pH 8.3), 40mM KCl, 6mM $MgCl_2$, 4mM DTT, 0.4mM poly(rA)•$(dT)_{12-18}$ and 0.5mM [^{3}H]-TTP (10-20c/m/pmol) in a reaction volume of 25µl.

Reaction Buffer:
10X Buffer AMV-RT
250mM Tris-HCl (pH 8.3), 500mM KCl, 50mM $MgCl_2$ and 20mM DTT.

Storage Buffer:
200mM K-phosphate (pH 7.2), 0.2% Triton™ X-100, 2mM DTT and 50% glycerol.

Thermal Inactivation: 80°C for 10 minutes

Application:
- *First strand synthesis of cDNA.*
- *Synthesis of cDNA for cloning.*
- *cDNA labeling.*
- *Primer extensions and RNA sequencing.*
- *RT-PCR.*
- *Dideoxy sequencing of DNA and RNA.*

Quality Control:
All preparations are assayed for contaminating endonuclease, exonuclease and non-specific RNase, as well as single- and double-stranded DNase activities.

*Due to viscosity of the enzyme, please briefly centrifuge the vial for full recovery of the enzyme to the bottom upon receival. Please use positive displacement pipets or low-binding pipet tips for maximum transferring efficiency.

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Product Datasheet

AMV Reverse Transcriptase (Recombinant)

Product No : ME2302
Quantity : 2500u

Lot :
Expiry Date :
Concentration : 20u/µl
Supplied with : 10X Buffer AMV-RT
(New improved buffer system)
Store at -70°C for long term periods
Store at -20°C for short term (1 month)

info@vivantechnologies.com

Description:
Avian Myeloblastosis Virus (AMV) Reverse Transcriptase is an RNA dependent DNA polymerase (αβ holoenzyme) with molecular weight of 157,000 daltons. This enzyme can synthesize a complementary DNA strand initiating from a primer using either RNA (cDNA synthesis) or single-stranded DNA as a template.

Features:
- Ultra pure recombinant protein.
- Maintains the RNA- and DNA-dependent DNA polymerase and RNase H activities.
- RNase H activities can be regulated over a wide range of temperatures.
- Capable of synthesizing cDNA over a wide range of temperatures.

Unit Definition:
1u is defined as the amount of enzyme that is required to incorporate 1nmol of dTMP into acid-insoluble material in 10 minutes at 37°C using Poly(rA)•$(dT)_{12-18}$ as a template primer.

Assay Conditions:
50mM Tris-HCl (pH 8.3), 40mM KCl, 6mM $MgCl_2$, 4mM DTT, 0.4mM poly(rA)•$(dT)_{12-18}$ and 0.5mM [^{3}H]-TTP (10-20c/m/pmol) in a reaction volume of 25µl.

Reaction Buffer:
10X Buffer AMV-RT
250mM Tris-HCl (pH 8.3), 500mM KCl, 50mM $MgCl_2$ and 20mM DTT.

Storage Buffer:
200mM K-phosphate (pH 7.2), 0.2% Triton™ X-100, 2mM DTT and 50% glycerol.

Thermal Inactivation: 80°C for 10 minutes

Application:
- *First strand synthesis of cDNA.*
- *Synthesis of cDNA for cloning.*
- *cDNA labeling.*
- *Primer extensions and RNA sequencing.*
- *RT-PCR.*
- *Dideoxy sequencing of DNA and RNA.*

Quality Control:
All preparations are assayed for contaminating endonuclease, exonuclease and non-specific RNase, as well as single- and double-stranded DNase activities.

*Due to viscosity of the enzyme, please briefly centrifuge the vial for full recovery of the enzyme to the bottom upon receival. Please use positive displacement pipets or low-binding pipet tips for maximum transferring efficiency.

Product Use Limitation
This product is for research purposes and *in vitro* use only.