



ProFoldin

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INSTRUCTIONS

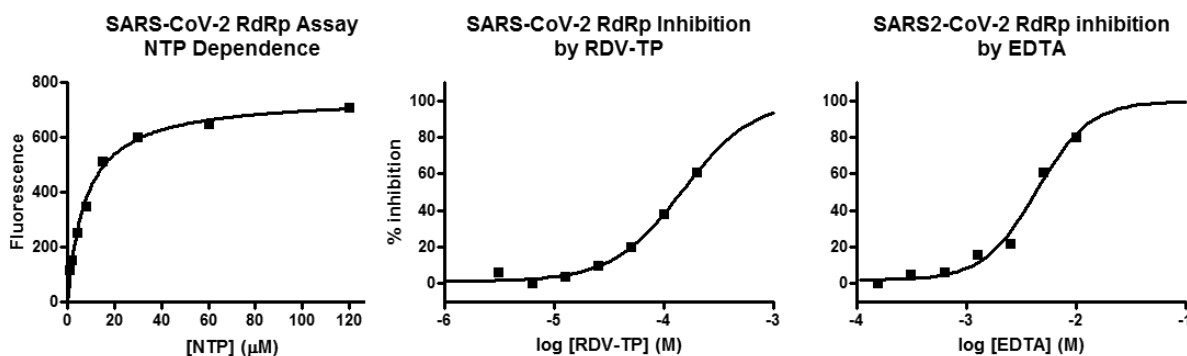
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SARS-CoV-2 RNA-Dependent RNA Polymerase (RdRp)

SARS-CoV-2 RdRp complex – for 100 assays

Catalog No. RDRP-100S2

Protein construct:	Wild-type RNA-dependent RNA polymerase composed of the complex of the nsp12, nsp7 and nsp8 proteins (1:1:2) from SARS-CoV-2 virus.
MW:	164 kDa
Enzyme concentration:	2 μ M (50 x SARS-CoV-2 RdRp)
RNA polymerase assay:	The RNA polymerase activity is measured by using the SARS-CoV-2 RNA polymerase assay kit-100 (Catalog No. S2RPA100K).
Storage temperature:	-20 or -80°C. Do not freeze-and-thaw repeatedly.
Enzyme dilution:	Use the 1 x assay to dilute the enzyme just before the assay. Do not store diluted enzyme solution.



The **SARS-CoV-2 RdRp complex – for 100 assays (Catalog No. RDRP-100S2)** includes 50 μ l of 50 x RNA-dependent RNA Polymerase composed of the complex of the nsp12, nsp7 and nsp8 proteins from SARS-CoV-2 virus. It is for 100 assays in a 384-well plate assay format (25 μ l reaction) or 50 assays in a 96-well plate format (50 μ l reaction).

Assay Protocol

The following assay protocol is based on the 384-well plate assay format (plate type: Matrix 4318 or alike). The reaction volume is 25 μ l and the final assay volume is 90 μ l. For 96-well plate assays (plate type: Costar 3915 or alike), the reaction volume is 50 μ l and the final assay volume is 180 μ l.



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1. Reaction:

The total volume of each reaction mixture is 25 μ l including 21 μ l of H₂O, 2.5 μ l of 10 x Buffer, 0.5 μ l of 50 x template, 0.5 μ l of 50 x RNA polymerase and 0.5 μ l of 50 x NTPs. Incubate the reaction mixture at 34°C for 2 hours.

2. Detection:

Dilute the 10x fluorescence dye with water to make the 1 x dye. Mix 65 μ l of the 1 x dye with 25 μ l of the reaction mixture. Measure the fluorescence intensity at 535 nm using the excitation wavelength at 485 nm in 10 min.

Assay Protocol for enzyme inhibition

The assay can be optimized in terms of assay linearity and sensitivity to competitive inhibitors.

ProFoldin offers HTS assay development service. For more information, please visit our website at <http://www.profoldin.com/services.html>.

Related Products

RNA polymerase assay kits:

GS2RPA020KE	Gel-based SARS-CoV-2 RdRp assay kit
S2RPA100K	SARS-CoV-2 RNA polymerase (RdRp) assay kit-100
S2RPA100KE	SARS-CoV-2 RNA polymerase (RdRp) assay kit plus -100
VRT100K	Viral (Flavivirus) RNA-dependent RNA Polymerase Assay Kit - 100
RPA100KE	<i>E. coli</i> RNA Polymerase Assay Kit Plus
RPA100KSE	<i>S. aureus</i> RNA Polymerase Assay Kit Plus
MRPA100KE	Human Mitochondrial RNA Polymerase Assay Kit Plus
T7RPA100KE	T7 RNA Polymerase Assay Kit Plus
EGA100KE	<i>E. coli</i> DNA Primase Assay Kit Plus
HGA100KE	<i>H. influenzae</i> DNA Primase Assay Kit Plus
AGA100KE	<i>S. aureus</i> DNA Primase Assay Kit Plus
PNP100KE	<i>E. coli</i> polynucleotide phosphorylase (PNPase) assay plus

DNA polymerase assay kits:

DPA100KE	<i>E. coli</i> DNA Polymerase III Alpha Assay Kit Plus
HDP A100KE	Human DNA Polymerase Alpha Assay Kit Plus
DPB100KE	Human DNA Polymerase Beta Assay Kit Plus
DPG100KE	Human DNA Polymerase Gamma Assay Kit Plus
HIV100KE	HIV Reverse Transcriptase Assay Kit Plus
AMV100KE	AMV Reverse Transcriptase Assay Kit Plus
MLV100KE	M-MLV Reverse Transcriptase Assay Kit Plus

For more information of drug targets and enzyme assays, please visit www.profoldin.com.